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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 20.3193 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-2
Perfect score: 489
Sequence: 1 MARLOTALLVLLVALQ.....EICADPRVFWKMLNLSQ 93

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_101002.*
1: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
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22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	489	100.0	93	AAW20058	Macrophage derived
2	489	100.0	93	AAW62783	Amino acid sequenc
3	489	100.0	93	AAW59433	Human chemokine pr
4	489	100.0	93	AAW40811	Macrophage-derived
5	489	100.0	93	AAW26175	Macrophage-derived
6	489	100.0	93	AAW24414	Human macrophage d
7	489	100.0	93	AAW05871	Human macrophage d
8	489	100.0	93	AAW05871	Macrophage derived
9	489	100.0	93	AAW07500	A human monokine d
10	489	100.0	93	AAO14046	Human macrophage-d

11	484	99.0	93	18	AAW07604	Cytokine beta-13 s
12	484	99.0	93	19	AAW57881	Human chemokine be
13	484	99.0	93	22	AAW68352	Amino acid sequenc
14	480	98.2	93	20	AAW05879	Human macrophage-d
15	463	94.7	93	20	AAW05880	Macaque macrophage
16	457	93.5	86	19	AAW59432	Human chemokine pr
17	445	91.0	93	18	AAW20059	Human macrophage d
18	445	91.0	93	20	AAW24417	Macrophage derived
19	445	91.0	93	20	AAW05872	Human macrophage-d
20	386	78.9	69	23	AAO20022	Human chemokine MD
21	386	78.9	69	23	AAO14155	Human MDC protein.
22	386	78.9	70	18	AAW20060	Human macrophage d
23	386	78.9	70	20	AAW24413	Macrophage derived
24	386	78.9	70	20	AAW05873	Human macrophage-d
25	386	78.9	154	20	AAW05878	yeast pre-pro-alpha
26	386	78.9	172	20	AAW29895	Human MDC and huma
27	386	78.9	334	20	AAW29904	Human MDC and HIV-
28	386	78.9	587	20	AAW17668	Human MDC and HIV-
29	380	77.7	68	18	AAW17668	Stem cell mobilisi
30	374	76.5	69	18	AAW20061	Human macrophage d
31	374	76.5	69	20	AAW24415	Macrophage derived
32	374	76.5	69	20	AAW05874	Human macrophage-d
33	362	74.0	69	18	AAW20062	Human macrophage d
34	362	74.0	69	20	AAW24416	Macrophage derived
35	362	74.0	69	20	AAW05875	Human macrophage-d
36	336	68.7	473	22	ABW61797	Chimeric chemokine
37	334	68.3	92	19	AAW59434	Mouse chemokine pr
38	332	67.9	92	20	AAW05876	Mouse macrophage-d
39	309	63.2	81	20	AAW05877	Rat macrophage-der
40	268	54.8	68	22	AAW61808	Murine MDC mature
41	268	54.8	68	23	AAW78392	Mouse chemokine mm
42	268	54.8	68	23	AAW68355	Murine chemokine m
43	214.5	43.9	67	23	AAW78396	Human/mouse hybrid
44	214.5	43.9	67	23	AAW68359	Chimeric chemokine
45	213	43.6	37	22	ABB39053	Peptide #6559 enco

ALIGNMENTS

RESULT 1
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX
AC AAW20058;
XX
DT 11-SEP-1997 (first entry)
XX
DE Macrophage derived chemokine for treating inflammation.
XX
KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW Rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX
OS Homo sapiens.
XX
FH Key
FT Peptide Location/Qualifiers
FT Protein /label= sig_peptide
FT /label= mat_protein
PN W09640923-A1.
XX
XX 19-DEC-1996.
XX
XX 07-JUN-1996; 96WO-US10114.
XX
XX 16-NOV-1995; 95US-0558658.
XX 07-JUN-1995; 95US-0479620.
XX (ICOS-) ICOS CORP.
XX

PI Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR N-PSDB; AAV76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and it's analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 100.0%; Score 489; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 DB 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 RESULT 2
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 AC AAW62783;
 XX
 XX Amino acid sequence of human STCP-1.
 KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX Homo sapiens.
 OS
 XX WO9824907-A1.
 XX 11-JUN-1998.
 XX 26-NOV-1997; 97WO-US21552.
 XX 03-DEC-1996; 96US-0760127.
 XX (AMGE-) AMGEN INC.
 XX Andrew DP, Chang M;
 PI WPI; 1998-33326/29.
 XX N-PSDB; AAV38933.
 XX
 PT Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells

XX Claim 1; Fig 2A-F; 96pp; English.
 PS
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 SQ Sequence 93 AA;
 Query Match 100.0%; Score 489; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 DB 1 MARLQTALLVLLVLLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQSQ 93
 RESULT 3
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 AC AAW59433;
 XX
 XX 27-AUG-1998 (first entry)
 DT Human chemokine protein 331D5.
 XX
 KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Peptide 1..24
 FT /label= signal
 FT 25..93
 FT /label= 331D5
 FT /note= "chemokine protein"
 XX
 XX WO9811226-A2.
 XX 19-MAR-1998.
 XX 09-SEP-1997; 97WO-US15315.
 XX 10-SEP-1996; 96US-0025724.
 XX (SCHE) SCHERING CORP.
 XX Gorman DM, Hedrick JA, Zlotnik A;
 PI WPI; 1998-207387/18.
 XX N-PSDB; AAV34997.
 XX
 PT Mammalian CC and CXCL chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions

XX Claim 1; Page 78; 82pp; English.

XX This sequence represents a novel human chemokine protein, 331D5.

CC Nucleic acid sequences encoding the chemokines can be used for detection,

CC in e.g. forensic techniques. Antibodies and other binding agents may be

CC used in diagnostics. The chemokines themselves are useful for treatment

CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,

CC regeneration, degeneration or atrophy may be treated by the inventive

CC compositions.

XX Sequence 93 AA;

SQ Query Match 100.0%; Score 489; DB 19; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKEICADPRVWVKMILKLSQ 93

DB 61 PRPGVLLTFRDKKEICADPRVWVKMILKLSQ 93

RESULT 4

AAW40811

ID AAW40811 standard; Protein; 93 AA.

XX AAW40811;

AC AAW40811;

DT 01-APR-1998 (first entry)

DE Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;

KW arthritis; inflammatory disorder; cancer; Crohn's disease;

KW atherosclerosis.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "leader peptide"

FT Protein 25..93

FT /note= "mature protein"

XX US568927-A.

PN 18-NOV-1997.

XX 07-JUN-1995; 95US-0480449.

XX 07-JUN-1995; 95US-0480449.

XX (ICOS-) ICOS CORP.

PA Godiska R, Gray PW;

PI WPI; 1998-008038/01.

XX N-PSDB; AAT99233.

XX Antibodies specific for macrophage-derived chemokine - useful for

PT purifying or detecting the chemokine or modulating its activity

XX Claim 3; Column 21-24; 22pp; English.

XX This sequence represents the macrophage-derived chemokine (MDC). This

CC protein is used to produce the antibodies of the invention. The

CC antibodies are useful for purifying MDC polypeptides, for detecting

CC endogenous MDC in a host, and for modulating binding of MDC to its

CC receptors. The DNA encoding this sequence can be used for identifying and

CC isolating non-human MDC homologues. The MDC protein is potentially useful

CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can

CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX Sequence 93 AA;

SQ Query Match 100.0%; Score 489; DB 19; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKEICADPRVWVKMILKLSQ 93

DB 61 PRPGVLLTFRDKKEICADPRVWVKMILKLSQ 93

RESULT 5

AAV26175

ID AAV26175 standard; Protein; 93 AA.

XX AAV26175;

AC AAV26175;

DT 29-SEP-1999 (first entry)

DE Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;

KW humoral response; cell-mediated response; PCR; immunostimulatory;

KW expression plasmid vector.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "signal peptide"

FT Protein 25..93

FT /note= "mature macrophage-derived chemokine"

XX WO9929728-A1.

PN 17-JUN-1999.

XX 11-DEC-1998; 98WO-US26291.

XX 11-DEC-1997; 97US-0069281.

XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.

PA Devico AL, Gallo RC, Garzino-Demo A;

PI WPI; 1999-385578/32.

XX N-PSDB; AAX80630.

XX Methods of enhancing vaccine efficacy

PT Claim 6; Fig 1A(1)-1A(2); 134pp; English.

PS The present sequence is macrophage-derived chemokine. This belongs to

CC the CC class of chemokines. The efficacy of a vaccine is enhanced by

CC combining it with one or more chemokines to enhance the immune response

CC to an antigen. This can be humoral or cell-mediated immune response. The

CC purified chemokines, fragments, derivatives or analogues are

CC administered either concurrently with one or more purified antigens

CC against which an immune response is desired or within a time period

CC either before or after antigen administration. The chemokine gene is

CC isolated by PCR, and administered by constructing an expression plasmid

CC vector which can be expressed in a coordinated manner upon introduction

CC in a suitable cell. The vaccines are immunostimulatory and can be used

CC to treat microbial diseases especially HIV.

SQ Sequence 93 AA;

Query Match 100.0%; Score 489; DB 20; Length 93;

Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

DB 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

RESULT 6

AAY24414

ID AAY24414 standard; Protein; 93 AA.

XX

AC AAY24414;

XX

XX 24-SEP-1999 (first entry)

DE Human macrophage derived chemokine.

XX

KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide

FT 1..24

FT /label= signal

FT Protein

FT 25..93

FT /label= MDC

XX

PN US5932703-A.

XX

PD 03-AUG-1999.

XX

PF 07-JUN-1996; 96US-0660542.

XX

PR 07-JUN-1996; 96US-0660542.

XX

PR 07-JUN-1995; 95US-0479620.

XX

PR 16-NOV-1995; 95US-0558658.

XX

PA (ICOS-) ICOS CORP.

XX

PI Godiska R, Gray PW;

XX

DR WPI; 1999-443621/37.

XX

DR N-PSDB; AAX90162.

XX

PT Macrophage derived chemokine analogues useful for inhibiting.

XX

PT Macrophage derived chemokine-induced chemotaxis

XX

PS Claim 2; Column 41-43; 43pp; English.

XX

CC The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis. The present sequence represents human MDC.

XX

SQ Sequence 93 AA;

Query Match

Best Local Similarity 100.0%; Score 489; DB 20; Length 93;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches

93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

DB 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

RESULT 7

AAY05871

ID AAY05871 standard; Protein; 93 AA.

XX

AC AAY05871;

XX

XX 02-AUG-1999 (first entry)

XX

DE Human macrophage-derived C-C chemokine MDC.

XX

KW MDC; macrophage derived chemokine; C-C chemokine; human; antagonist; chemottractant; antiproliferative; dermatological; immunosuppressive; antiinflammatory; antitastmatic; antitaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy; vaccine.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide

FT 1..24

FT /note= "signal peptide"

FT Protein

FT 25..93

FT /note= "mature protein"

XX

PN W09915666-A2.

XX

PD 01-APR-1999.

XX

PF 28-SEP-1998; 98WO-US20270.

XX

PR 28-APR-1998; 98US-0067447.

XX

PR 26-SEP-1997; 97US-0939107.

XX

PA (ICOS-) ICOS CORP.

XX

PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX

DR WPI; 1999-254715/21.

XX

DR N-PSDB; AAX58316.

XX

PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists

XX

PS Example 1; Page 124; 147pp; English.

XX

CC The present sequence represents a novel human C-C chemokine, designated macrophage derived chemokine (MDC) that binds to the CCR4 chemokine receptor. The invention provides vertebrate MDC polypeptides (see also AAY05876, AAY05877 and AAY05880) and isolated polynucleotides encoding them, vectors and host cells, and methods for the recombinant or synthetic production of MDC. Also provided are MDC analogues, antibodies and antagonists. The MDC antagonists are used for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for treating asthma (all claimed). MDC polypeptides are also used in claimed vaccine compositions.

XX

SQ Sequence 93 AA;


```
Query Match      100.0%; Score 489; DB 20; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.6e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLAVLALQATGAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
    |||
DB 1 MARLQATLLVLLVLLAVLALQATGAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
    |||
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
    |||
DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
    |||

RESULT 8
AAV06829
ID AAY06829 standard; Protein; 93 AA.
XX
AC AAY06829;
XX
DT 25-JUN-1999 (first entry);
XX
DE Macrophage derived chemokine (MDC) encoding DNA.
XX
KW Macrophage derived chemokine; MDC; lentivirus infection; human; HIV;
KW human immunodeficiency virus; feline immunodeficiency virus;
KW bovine immunodeficiency virus.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 27..45
FT /note= "N-terminal fragment specifically claimed
FT for in claim 18"
FT
FT Peptide 26..45
FT /note= "N-terminal fragment specifically claimed
FT for in claim 19"
FT
FT WO9914237-A1.
XX
PN 25-MAR-1999.
XX
PD 16-SEP-1998; 98WO-US19450.
XX
PF 16-SEP-1997; 97US-0931764.
XX
PR 16-SEP-1997; 97US-0931764.
XX
PA (ALKU ) AKZO NOBEL NV.
XX
PI Devico AL, Gallo RC, Garzino-Demo A, Markham PD;
PI Pal R;
XX
XX WPI; 1999-244024/20.
DR N-PSDB; AAX32817.
XX
PT Treatment or prevention of lentivirus, particularly HIV infection
XX
PS Claim 16; Page 97-98; 103pp; English.
XX
XX This represents a human macrophage derived chemokine (MDC). The
XX invention provides a novel method of treating or preventing lentivirus
XX (LV) infection or replication in a human subject, that comprises
XX administering to the subject a composition comprising MDC or a derivative
XX of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The
XX products can be used for treating or preventing LV infection or
XX replication, particularly HIV infection or replication. The products can
XX also be used for the prognosis for a LV infection. The products can
XX infection using the MDC as a prognostic indicator. The methods can also
XX be used with other LVs, e.g. simian immunodeficiency virus, feline
XX immunodeficiency virus and bovine immunodeficiency virus.
XX
SQ Sequence 93 AA;

Query Match      100.0%; Score 489; DB 20; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.6e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 MARLQATLLVLLVLLAVLALQATGAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
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QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
    |||
DB 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
    |||

RESULT 9
AAB07500
ID AAB07500 standard; Protein; 93 AA.
XX
XX AAB07500;
AC AAB07500;
XX
DT 20-OCT-2000 (first entry);
XX
DE A human monokine derived chemokine.
XX
KW Systemic memory T cell; CCR4; TARC; integrin dependent arrest;
KW thymus and activation-regulated chemokine; vascular receptor;
KW MDC; monokine derived chemokine; adhesion trigger; inflammation.
XX
OS Homo sapiens.
XX
PN WO2000041724-A1.
XX
PD 20-JUL-2000.
XX
PF 14-JAN-2000; 2000WO-US00953.
XX
PR 15-JAN-1999; 99US-0232878.
XX
PA (STRD ) UNIV LELAND STANFORD JUNIOR.
PA (LEUK-) LEUKOSITE INC.
XX
PI Butcher EC, Campbell JJ, Wu L, Rottman JB;
XX
XX WPI; 2000-475957/41.
DR N-PSDB; AAA58874.
XX
PT Modulating the trafficking of systemic memory T cells in mammals by
PT administering a CCR4 modulating agent, useful for the treatment of
PT inflammation -
XX
PS Disclosure; Page 38; 39pp; English.
XX
XX The specification describes a method of modulating the trafficking of
XX systemic memory T cells in a mammalian host. The method comprises
XX administering a CCR4 modulating agent. It has been found that systemic
XX T cells such as express high levels of CCR4. Ligands of CCR4 such as
XX TARC (thymus and activation-regulated chemokine) and MDC (monokine
XX derived chemokine) act as an adhesion trigger and, upon CCR4 binding,
XX these cells undergo integrin dependent arrest to the appropriate
XX vascular receptors. This arrest acts to localize the cells at the
XX target site. The method modulates this triggering and CCR4 mediated
XX chemotaxis to affect the localization of T cells in targeted tissues.
XX The active agent may be a CCR4 agonist that acts to enhance T cell
XX localization. Alternatively, it may be an antagonist that blocks CCR4
XX biological activity. A CCR4 antagonist may be administered for the
XX treatment of inflammation. The present sequence represents a human MDC.
XX
SQ Sequence 93 AA;

Query Match      100.0%; Score 489; DB 21; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.6e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLAVLALQATGAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
    |||
DB 1 MARLQATLLVLLVLLAVLALQATGAGPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
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QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 |||||
 Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 |||||

RESULT 10
 AAO14046
 ID AAO14046 standard; Protein; 93 AA.
 XX AAO14046;
 AC AAO14046;
 DT 08-MAY-2002 (first entry)
 DE Human macrophage-derived C-C chemokine (MDC).
 XX Human; macrophage-derived C-C chemokine; MDC; immune system;
 KW leukocyte; monocyte; calcium flux; chemotaxis; medical imaging;
 KW infection; inflammation; macrophage; Crohn's disease;
 KW rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;
 KW chemotherapy; radiation therapy; tumour.
 XX Homo sapiens.
 OS Homo sapiens.
 FH Key
 FT Peptide
 FT Protein
 FT 1..24
 FT /note= "Signal peptide"
 FT 25..93
 FT /note= "Mature macrophage-derived C-C chemokine, this is
 a specifically claimed region"
 FT Misc-difference 25..39
 FT /note= "Specifically claimed region"
 XX US6320023-B1.
 PN 20-NOV-2001.
 PD 07-JUN-1995; 95US-0479603.
 PF 07-JUN-1995; 95US-0479603.
 PR (ICOS-) ICOS CORP.
 PA Godiska R, Gray PW;
 PI WPI; 2002-074410/10.
 DR N-PSDB; AAK98372.
 XX Macrophage derived C-C chemokines useful in medical imaging and for the
 development of agents for controlling inflammation
 PT Claim 1; Fig 1; 22pp; English.
 PS The present sequence represents a novel human macrophage-derived C-C
 CC chemokine (MDC) of the invention. Chemokines comprise a family of small
 CC secreted proteins which attract and activate leukocytes, thereby aiding
 CC in the stimulation and regulation of the immune system. C-C cytokines are
 CC a subfamily known to activate monocytes, causing calcium flux and
 CC chemotaxis. The invention comprises a novel human MDC protein and nucleic
 CC acids, as well as methods for the production of the MDC protein. The MDC
 CC of the invention is useful in medical imaging (e.g. for imaging sites of
 CC infection, inflammation, and other sites having C-C chemokine receptor
 CC molecules. Inhibition of MDC is believed to be useful in treating
 CC diseases involving macrophages (e.g. Crohn's disease, rheumatoid
 CC arthritis or atherosclerosis). Alternatively, augmenting the effects of
 CC MDC is believed to be beneficial towards wound healing and angiogenesis.
 CC Also MDC or MDC agonists may be beneficial to patients receiving
 CC chemotherapy or radiation therapy and in the treatment of tumours.
 XX Sequence 93 AA;
 SQ Query Match 100.0%; Score 489; DB 23; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.6e-51;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
 |||||
 Db 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 |||||
 Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQSQ 93
 |||||

RESULT 11
 AAW07604
 ID AAW07604 standard; Protein; 93 AA.
 XX AAW07604;
 AC AAW07604;
 DT 03-SEP-1997 (first entry)
 DE Cytokine beta-13 stimulates migration/activation of immune cells.
 XX Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
 KW defence; activation; eosinophil; monocyte; macrophage; T lymphocyte;
 KW T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection;
 KW Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis;
 KW leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
 KW rheumatoid arthritis; silicosis.
 XX Homo sapiens.
 OS Homo sapiens.
 FH Key
 FT Misc-difference 45
 FT /note= "given as encoded by CAC codon in AAT44026"
 FT PN WO9639521-A1.
 XX 12-DEC-1996.
 PD 06-JUN-1995; 95WO-US07294.
 PF 06-JUN-1995; 95WO-US07294.
 PR (HUMA-) HUMAN GENOME SCI INC.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 XX Li H, Seibel G;
 PI WPI; 1997-043143/04.
 DR N-PSDB; AAT44026.
 XX Human chemokine beta-13 - useful for treating solid tumours,
 PT leukaemia, infections, autoimmune disease, fibrotic disorders,
 PT psoriasis, etc.
 XX Claim 10; Page 46; 58pp; English.
 PS AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
 CC C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for
 CC treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13
 CC stimulates the invasion and activation of host defence cells making it
 CC useful for treating solid tumours, e.g. Kaposi's sarcoma, and for
 CC enhancing resistance to acute and chronic infections, e.g. mycobacterial
 CC infections. The chemokine induces chemotactic migration of monocytes,
 CC neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to
 CC sites where they are needed. Eosinophils may be attracted to the site
 CC of a parasitic infection to kill parasite larvae. Ck-beta-13 also
 CC recruits debris-clearing and connective tissue promoting inflammatory
 CC cells, and is therefore used to stimulate wound healing, prevent
 CC scarring and treat liver cirrhosis, osteoarthritis and pulmonary
 CC fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
 CC mediated autoimmune diseases, psoriasis, to regulate hematopoiesis and
 CC to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
 CC chemokine which is useful for treating certain autoimmune diseases,

CC atherosclerosis, chronic inflammatory and infective diseases, allergic
 CC reactions, rheumatoid arthritis, silicosis and bone marrow failure.

XX Sequence 93 AA;

Query Match 99.0%; Score 484; DB 18; Length 93;
 Best Local Similarity 98.9%; Pred. No. 1e-50;
 Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
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 Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

RESULT 12
 AAW57881
 ID AAW57881 standard; Protein; 93 AA.

XX AAW57881;

DT 23-SEP-1998 (first entry)

XX Human chemokine beta-13.

XX Chemokine beta-13; human; CKbeta-13; immune system-related disorder;
 KW tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis;
 KW autoimmune disease; bone marrow stem cell colony formation inhibitor;
 KW haematopoiesis regulator; therapy.

XX Homo sapiens.

XX WO9824908-A1.

XX 11-JUN-1998.

XX 05-DEC-1997; 97WO-US23144.

XX 05-DEC-1996; 96US-0032432.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Li H, Seibel G;

XX WPI: 1998-333327/29.

XX N-PSDB; AAV40786.

XX Human chemokine beta-13 polypeptide - useful in diagnosis and
 PT treatment of immune-system related disorders e.g. cancer of the
 PT immune system, leukaemias, autoimmune diseases etc.

PS Claim 18; Fig 1; 86pp; English.

XX This sequence is the human chemokine beta-13 (CKbeta-13) of the
 CC invention. The polypeptide and nucleic acid are useful in diagnosis
 CC and treatment of immune system-related disorders in mammals (preferably
 CC humans). Such disorders include tumours, cancers, interstitial lung
 CC disease and dysregulation of immune cell function including leukaemias,
 CC lymphomas, autoimmune diseases etc. For example, certain tissues in
 CC mammals with cancer of the immune system express enhanced/decreased
 CC levels of CKbeta-13 and mRNA encoding CKbeta-13, and diagnosis can be
 CC achieved by assaying CKbeta-13 gene expression and comparing to
 CC standard levels. The polypeptides can be administered therapeutically in
 CC pharmaceutical compositions e.g. to treat immune system-related disorders
 CC as above, treat sepsis, inhibit bone marrow stem cell colony formation
 CC during cancer therapy, regulate haematopoiesis, stimulate wound healing
 CC etc. Compositions comprising the polynucleotides may also be
 CC administered, especially to express CKbeta-13 polypeptide in hosts to
 CC treat dysfunctions associated with aberrant endogenous CKbeta-13
 CC activity. The polynucleotides are also useful for mapping of

CC chromosomes/chromosome sites. The polypeptides are useful to screen for
 CC agonists and antagonists of CKbeta-13 activity. The antibodies are
 CC useful diagnostically or therapeutically e.g. as antagonists to treat
 CC subjects requiring CKbeta-13 reduction.

XX Sequence 93 AA;

Query Match 99.0%; Score 484; DB 19; Length 93;
 Best Local Similarity 98.9%; Pred. No. 1e-50;
 Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||
 Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 |||||

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
 |||||

RESULT 13
 AAB68352
 ID AAB68352 standard; Protein; 93 AA.

XX AAB68352;

XX 09-JUL-2001 (first entry)

XX Amino acid sequence of human chemokine beta-13 polypeptide.

XX Chemokine beta-13; CKbeta-13; Addison's disease; haemolytic anaemia;
 KW rheumatic arthritis; dermatitis; allergic encephalomyelitis;
 KW glomerulonephritis; Goodpasture's Syndrome; Grave's Disease;
 KW multiple sclerosis; allergic reaction; asthma; anaphylaxis;
 KW hypersensitivity; blood group incompatibility; organ rejection;
 KW graft vs host disease; inflammatory disorder; septic shock;
 KW infectious diseases; immune system relative disorder; leukemia;
 KW wound healing; inflammatory bowel disease; cancer; psoriasis;
 KW hypervascular disease; hyperproliferative disorder; atherosclerosis;
 KW bone marrow failure; inflammation.

XX Homo sapiens.

XX WO200132128-A2.

XX 10-MAY-2001.

XX 02-NOV-2000; 2000WO-US30237.

XX 03-NOV-1999; 99US-0432768.

XX (HUMA-) HUMAN GENOME SCI INC.
 PA (BGHM) BRIGHAM & WOMENS HOSPITAL INC.
 PA (SMIK) SMITHKLINE BEECHAM CORP.

XX Ullrich S, Seibel G, Li H, Lusinskas FW;

XX WPI: 2001-316379/33.

XX N-PSDB; AAF85169.

XX Novel human chemokine beta-13 polypeptides useful for treating
 PT autoimmune diseases, inflammatory diseases, infectious diseases,
 PT allergic conditions, hypervascular diseases, tumors and for wound
 PT healing -

XX Claim 18; Fig 1; 220pp; English.

XX The present sequence represents a human chemokine beta-13 (CKbeta-13).
 CC CKbeta-13 polypeptides and polynucleotides are useful for treating
 CC deficiencies or disorders of immune systems, haematopoietic cells,
 CC autoimmune disorders such as Addison's disease, haemolytic anaemia,
 CC rheumatic arthritis, dermatitis, allergic encephalomyelitis,
 CC glomerulonephritis, Goodpasture's Syndrome, Grave's Disease and multiple

CC sclerosis, allergic reactions such as asthma, anaphylaxis,
 CC hypersensitivity, blood group incompatibility, organ rejection, graft
 CC vs host disease, inflammatory disorders including septic shock, sepsis
 CC or systemic inflammatory response syndrome, infectious diseases, immune
 CC system relative disorders including leukemia, wound healing, acute and
 CC chronic infection and inflammatory bowel disease, cancers, psoriasis,
 CC hypervascular diseases, hyperproliferative disorders, atherosclerosis
 CC and bone marrow failure. They are also useful for modulating haemostatic
 CC or thrombolytic activity, for diagnosing infectious agents, modulate
 CC inflammation, inhibit bone marrow stem cells, colony formation, inhibit
 CC proliferation and differentiation of haematopoietic cells, inhibit
 CC epidermal keratinocyte proliferation, as anti-neovascularisation agent,
 CC enhance host defences, inhibit T-cell proliferation, prevent scarring
 CC during wound healing, increasing eosinophils, mobilize bone marrow stem
 CC cells, inhibit cell growth and inhibit chemotaxis and activation of
 CC macrophages.

XX Sequence 93 AA;

Query Match 99.0%; Score 484; DB 22; Length 93;
 Best Local Similarity 98.9%; Pred. No. 1e-50;
 Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 DB 1 MARLQALLVLLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKKEICADPRVPWVKMLNKLSQ 93
 DB 61 PRPGVLLTFRDKKEICADPRVPWVKMLNKLSQ 93

RESULT 14

AA05879
 ID AAY05879 standard; Protein; 93 AA.

XX AAY05879;

DT 02-AUG-1999 (first entry)

DE Human macrophage-derived C-C chemokine MDC analogue.

XX MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

OS Homo sapiens.
 OS Synthetic.

FT Key Location/Qualifiers
 FT Misc-difference 26 /note= "not Pro"

FT W09915666-A2.

PN 01-APR-1999.

XX 28-SEP-1998; 98WO-US20270.

XX 28-APR-1998; 98US-0067447.

PR 26-SEP-1997; 97US-0939107.

XX (ICOS-) ICOS CORP.

XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX WPI; 1999-254715/21.

XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists

PS Disclosure; Page 144; 147pp; English.

XX The present sequence represents a synthetic analogue of the novel
 CC human macrophage derived C-C chemokine MDC (see also AAY05871). The
 CC analogue has an amino acid substitution at residue 2 of the mature
 CC polypeptide. MDC analogues (see also AAY05872-75) are expected to be
 CC antagonists of MDC, inhibiting activity by competitively binding to
 CC the receptor that recognises MDC or forming inactive heterodimers
 CC with MDC. MDC antagonists are used in claimed methods for the
 CC preparation of medicaments for the suppression of the proliferation
 CC of a mammalian immunodeficiency virus, for inhibiting platelet
 CC aggregation in a mammal, for the treatment or palliation of lupus
 CC erythematosus in a mammal, for inhibiting MDC-induced activation,
 CC chemotaxis or proliferation of cells that express CCR4, for
 CC inhibiting or palliating an allergic reaction in a mammal, and for
 CC treating asthma.

XX Sequence 93 AA;

Query Match 98.2%; Score 480; DB 20; Length 93;
 Best Local Similarity 98.9%; Pred. No. 3.2e-50;
 Matches 92; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
 DB 1 MARLQALLVLLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKEICADPRVPWVKMLNKLSQ 93

DB 61 PRPGVLLTFRDKKEICADPRVPWVKMLNKLSQ 93

RESULT 15

AA05880
 ID AAY05880 standard; Protein; 93 AA.

XX AAY05880;

DT 02-AUG-1999 (first entry)

DE Macaque macrophage-derived C-C chemokine MDC.

XX MDC; macrophage derived chemokine; C-C chemokine; macaque;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

OS Macaca sp.

FT Key Location/Qualifiers

FT Peptide 1..24

FT Protein /note= "signal peptide"

FT /note= "mature protein"

PN W09915666-A2.

XX 01-APR-1999.

XX 28-SEP-1998; 98WO-US20270.

XX 28-APR-1998; 98US-0067447.

PR 26-SEP-1997; 97US-0939107.

XX (ICOS-) ICOS CORP.

XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX WPI; 1999-254715/21.

XX N-PSDB; AAX58338.

XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists

XX

PS Claim 5; Page 147; 147pp; English.

XX

CC The present sequence represents a novel macaque C-C chemokine,
CC designated macrophage derived chemokine (MDC), that binds to the
CC CCR4 chemokine receptor. Macaque MDC shows about 94% amino acid
CC sequence identity to human MDC. The invention provides vertebrate
CC MDC polypeptides (see also AAY05871, AAY05876 and AAY05877) and isolated
CC polynucleotides encoding them, vectors and host cells, and methods
CC for the recombinant or synthetic production of MDC. Also provided
CC are MDC analogues, antibodies and antagonists. The MDC antagonists
CC are used for the preparation of medicaments for the suppression of
CC the proliferation of a mammalian immunodeficiency virus, for
CC inhibiting platelet aggregation in a mammal, for the treatment or
CC palliation of lupus erythematosus in a mammal, for inhibiting
CC MDC-induced activation, chemotaxis or proliferation of cells that
CC express CCR4, for inhibiting or palliating an allergic reaction in
CC a mammal, and for treating asthma (all claimed). MDC polypeptides
CC are also used in claimed vaccine compositions.

XX

SQ Sequence 93 AA;

Query Match 94.7%; Score 463; DB 20; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.6e-48;

Matches 87; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

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Db 1 MARLQTVFLGVLILLVAVALQATEAGPYGANMEDSVCCRDYVRYRPLRVVKKHFYWTSDSC 60

QY 61 PRPGVVLLTFRDKEICADPRVPWVKMILNLSQ 93

Db 61 PRPGVVLLTFRDKEICADPRVPWVKMILNLSQ 93

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Job time : 21.3193 secs

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OM protein - protein search, using sw model

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Perfect score: 489
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Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues
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Post-processing: Minimum Match 0%
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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	489	100.0	93	1 US-08-480-449-2	Sequence 2, Appli
2	489	100.0	93	2 US-08-660-542-2	Sequence 2, Appli
3	489	100.0	93	4 US-09-232-878-6	Sequence 6, Appli
4	489	100.0	93	4 US-08-479-603-2	Sequence 2, Appli
5	489	100.0	93	5 PCT-US95-07294-2	Sequence 2, Appli
6	445	91.0	93	2 US-08-660-542-25	Sequence 25, Appli
7	386	78.9	70	2 US-08-660-542-30	Sequence 30, Appli
8	374	76.5	69	2 US-08-660-542-31	Sequence 31, Appli
9	362	74.0	69	2 US-08-660-542-32	Sequence 32, Appli
10	164	33.5	95	4 US-09-230-637-26	Sequence 26, Appli
11	159	32.5	89	1 US-08-208-339A-4	Sequence 4, Appli
12	159	32.5	89	3 US-08-722-719-6	Sequence 6, Appli
13	157	32.1	89	4 US-09-334-951-6	Sequence 6, Appli
14	153	31.3	78	1 US-08-375-346A-6	Sequence 6, Appli
15	153	31.3	78	1 US-08-467-123B-6	Sequence 6, Appli
16	151.5	31.0	91	1 US-08-480-449-21	Sequence 21, Appli
17	151.5	31.0	91	2 US-08-660-542-21	Sequence 21, Appli
18	151.5	31.0	91	4 US-08-679-493A-155	Sequence 155, App
19	151.5	31.0	91	4 US-08-478-603-21	Sequence 21, Appli
20	150.5	30.8	90	4 US-09-230-637-40	Sequence 40, Appli
21	150.5	30.8	91	1 US-08-347-492B-12	Sequence 12, Appli
22	150.5	30.8	91	1 US-08-375-346A-5	Sequence 5, Appli
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24	150.5	30.8	91	2 US-08-421-144A-8	Sequence 8, Appli
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32	147	30.1	91	2 US-08-633-682-5	Sequence 5, Appli
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36	144.5	29.6	104	4 US-08-744-419-2	Sequence 2, Appli
37	143	29.2	70	4 US-09-334-951-65	Sequence 65, Appli
38	141	28.8	93	1 US-08-173-209A-2	Sequence 2, Appli
39	141	28.8	93	1 US-08-347-492B-6	Sequence 6, Appli
40	141	28.8	93	2 US-08-798-143-6	Sequence 6, Appli
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42	141	28.8	93	4 US-09-180-077-7	Sequence 7, Appli
43	141	28.8	93	4 US-09-334-951-2	Sequence 2, Appli
44	141	28.8	93	5 PCT-US95-15484-6	Sequence 6, Appli
45	140.5	28.7	92	4 US-09-195-106-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-08-480-449-2
; Sequence 2, Application US/08480449
; Patent No. 568927
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER-READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480.449
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32779
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-480-449-2

Query Match 100.0%; Score 489; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 MARLQATLLVLLVLAVALQATEAGPYCANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
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DB 1 MARLQATLLVLLVLAVALQATEAGPYCANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
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Db 61 PRPGVLLTRDKICADPRVPWVKMLNLSQ 93
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RESULT 2
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-660-542-2

Query Match 100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
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Qy 61 PRPGVLLTRDKICADPRVPWVKMLNLSQ 93
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Db 61 PRPGVLLTRDKICADPRVPWVKMLNLSQ 93
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RESULT 3
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
```

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; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: US/09/232,878
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-232-878-6

Query Match 100.0%; Score 489; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
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Qy 61 PRPGVLLTRDKICADPRVPWVKMLNLSQ 93
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Db 61 PRPGVLLTRDKICADPRVPWVKMLNLSQ 93
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RESULT 4
US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-603-2

Query Match 100.0%; Score 489; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVYRPLRLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLSQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLSQ 93

RESULT 5

PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS: LINEAR
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
PCT-US95-07294-2

Query Match 100.0%; Score 489; DB 5; Length 93;
Best Local Similarity 100.0%; Pred. No. 5.2e-54;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVYRPLRLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLSQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLSQ 93

RESULT 6

US-08-660-542-25
; Sequence 25, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature


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; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-208-339A-4

Query Match      32.5%; Score 159; DB 1; Length 89;
Best Local Similarity 36.3%; Pred. No. 1.1e-12;
Matches 33; Conservative 18; Mismatches 34; Indels 6; Gaps 2;

QY 1 MARIQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHEFYWTSDSC 60
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Db 1 MKGLAALLVLCVTMALC-----SCAQVGTNKE--LCCLVYTSWQIPKQFIVDYSETSPQC 54

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKL 91
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Db 55 PKPGVILLTKRGQICADPNKKWKQKVISDL 85

RESULT 12
US-08-722-719-6
; Sequence 6, Application US/08722719
; Patent No. 6001606
; GENERAL INFORMATION:
; APPLICANT: ROSEN, CRAIG A.
; APPLICANT: RUBIN, STEVEN M.
; APPLICANT: LI, HAODONG
; APPLICANT: ADAMS, MARK D.
; TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
; TITLE OF INVENTION: TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
; TITLE OF INVENTION: FACTOR-1 (MP1F-1) MONOCYTE COLONY INHIBITORY FACTOR
; TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-722-719-6

Query Match      32.5%; Score 159; DB 3; Length 89;
Best Local Similarity 36.3%; Pred. No. 1.1e-12;
Matches 33; Conservative 18; Mismatches 34; Indels 6; Gaps 2;

QY 1 MARIQTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHEFYWTSDSC 60
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Db 1 MKGLAALLVLCVTMALC-----SCAQVGTNKE--LCCLVYTSWQIPKQFIVDYSETSPQC 54

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKL 91
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Db 55 PKPGVILLTKRGQICADPNKKWKQKVISDL 85

RESULT 13
US-09-334-951-6
; Sequence 6, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MP1F-1)
; FILE REFERENCE: 1488.0330008
; CURRENT APPLICATION NUMBER: US/09/334,951
; CURRENT FILING DATE: 1999-06-17
; EARLIER APPLICATION NUMBER: US 08/208,339
; EARLIER FILING DATE: 1994-03-08
; EARLIER APPLICATION NUMBER: US 08/446,881
; EARLIER FILING DATE: 1995-05-05
; EARLIER APPLICATION NUMBER: US 08/465,682
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/468,775
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/722,719
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-951-6

Query Match      32.1%; Score 157; DB 4; Length 89;
Best Local Similarity 36.3%; Pred. No. 1.9e-12;
Matches 33; Conservative 18; Mismatches 34; Indels 6; Gaps 2;

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Db 1 MKGLAALLVLCVTMALC-----SCAQVGTNKE--LCCLVYTSWQIPKQFIVDYSETSPQC 54

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKL 91
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Db 55 PKPGVILLTKRGQICADPNKKWKQKVISDL 85

RESULT 14
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Seilhamer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; TITLE OF INVENTION: ITS PRODUCTION AND USES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
```

STREET: 3330 HILLVIEW AVENUE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/375,346A
FILING DATE: 19-JAN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LUTHER, BARBARA J.
REGISTRATION NUMBER: 33,954
REFERENCE/DOCKET NUMBER: PF-0026 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 855-0555
TELEFAX: (415) 855-0572
TELEX:
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
US-08-375-346A-6

Query Match 31.3%; Score 153; DB 1; Length 78;
Best Local Similarity 37.8%; Pred. No. 5.1e-12;
Matches 31; Conservative 16; Mismatches 29; Indels 6; Gaps 2;
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Db 2 LAALLVLVCTWALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPRP 55
QY 64 GVLLTFRDKKEICADPRVPWVK 85
Db 56 GVLLTKRGRQICADPNKKWVQ 77

RESULT 15
US-08-467-123B-6
Sequence 6, Application US/08467123B
Patent No. 5945506
GENERAL INFORMATION:
APPLICANT: Coleman, Roger
APPLICANT: Wilde, Craig C.
APPLICANT: Sellhammer, Jeffrey J.
TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
TITLE OF INVENTION: ITS PRODUCTION AND USES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375,346
FILING DATE: 19-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-467-123B-6
Query Match 31.3%; Score 153; DB 2; Length 78;
Best Local Similarity 37.8%; Pred. No. 5.1e-12;
Matches 31; Conservative 16; Mismatches 29; Indels 6; Gaps 2;
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Db 2 LAALLVLVCTWALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPRP 55
QY 64 GVLLTFRDKKEICADPRVPWVK 85
Db 56 GVLLTKRGRQICADPNKKWVQ 77
Search completed: July 28, 2003, 04:05:36
Job time : 9.81513 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 12.6996 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165A-2

Perfect score: 489

Sequence: 1 MARLQTALLVLLVLAVALQ.....EICADPRVWVKMILNKLQ 93

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Searched: 451899 seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_AA:*

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3: /cgn2_6/ptodata/2/pubpaa/US05_NEW_PUB.pep.*
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9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep1.*
11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep2.*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep3.*
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14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep.*
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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2	489	100.0	93	11	US-09-811-088-2
3	489	100.0	93	15	US-10-314-410-2
4	484	99.0	93	10	US-09-908-599-2
5	484	99.0	93	10	US-09-908-600-2
6	268	54.8	68	15	US-10-001-221A-3
7	214.5	43.9	67	15	US-10-001-221A-7
8	213	43.6	37	10	US-09-864-761-43730
9	159	32.5	89	10	US-09-334-923A-6
10	159	32.5	89	10	US-09-334-923A-6
11	159	32.5	89	10	US-09-925-302-792
12	153	31.3	71	10	US-09-144-838-3
13	153	31.3	78	15	US-10-158-366-6
14	152	31.1	78	15	US-10-001-221A-6
15	152	31.1	89	10	US-09-834-795A-34
16	152	31.1	89	12	US-09-834-794A-34

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Sequence 9, Appl
Sequence 29, Appl
Sequence 29, Appl
Sequence 8, Appl
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Sequence 12, Appl
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Sequence 7, Appl
Sequence 2, Appl
Sequence 6, Appl
Sequence 4, Appl
Sequence 3, Appl
Sequence 20, Appl
Sequence 31, Appl
Sequence 31, Appl

17 150.5 30.8 91 8 US-08-927-939-21
18 150.5 30.8 91 10 US-09-144-838-9
19 150.5 30.8 91 10 US-09-834-795A-29
20 150.5 30.8 91 12 US-09-834-794A-29
21 150.5 30.8 91 12 US-09-920-137A-8
22 150.5 30.8 91 12 US-09-537-858-1
23 150.5 30.8 91 15 US-10-158-366-5
24 150.5 30.8 91 15 US-10-057-275-8
25 150.5 30.8 91 15 US-10-293-705-12
26 145 30.8 69 11 US-09-792-793A-28
27 144 29.4 73 10 US-09-144-838-6
28 143 29.2 70 10 US-09-334-923A-65
29 143 29.2 70 10 US-09-334-954A-65
30 141 28.8 87 15 US-10-153-064-86
31 141 28.8 93 8 US-08-927-939-48
32 141 28.8 93 10 US-09-334-923A-2
33 141 28.8 93 10 US-09-834-795A-30
34 141 28.8 93 10 US-09-334-954A-2
35 141 28.8 93 12 US-09-834-794A-30
36 141 28.8 93 12 US-09-372-348-5
37 141 28.8 93 12 US-09-372-348-6
38 141 28.8 93 12 US-09-372-348-7
39 141 28.8 93 15 US-10-153-064-2
40 141 28.8 93 15 US-10-293-705-6
41 141 28.8 143 12 US-09-372-348-4
42 140.5 28.7 92 15 US-10-114-482-3
43 138.5 28.3 92 8 US-08-927-939-20
44 138.5 28.3 92 10 US-09-834-795A-31
45 138.5 28.3 92 12 US-09-834-794A-31

ALIGNMENTS

RESULT 1

US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Liljan
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 100.0%; Score 489; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 7.3e-50;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 MARLQTALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVKKHYFTWSDSC 60
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QY 61 PRPGVLLTFRDKKEICADPRVWVKMILNKLQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVWVKMILNKLQ 93
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RESULT 2

US-09-811-088-2

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; Sequence 2, Application US/09811088
; Patent No. US20020160446A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match      100.0%; Score 489; DB 11; Length 93;
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Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
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; PRIOR APPLICATION NUMBER: US/09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US/08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

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Best Local Similarity 100.0%; Pred. No. 7.3e-50;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PFI77P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match      99.0%; Score 484; DB 10; Length 93;
Best Local Similarity 98.9%; Pred. No. 2.8e-49;
Matches 92; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Db 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVYRRLPLRVVKKHFYWTSDSC 60
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Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
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RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,
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```

RESULT 9
US-09-334-923A-6
; Sequence 6: Application US/09334923A
; Patent No. US20020061551A1
; GENERAL INFORMATION:
; APPLICANT: Ruben, Steven M.
; APPLICANT: Li, Haodong
; TITLE OF INVENTION: Macrophage Inflammatory
; FILE REFERENCE: 1488.033000D
; CURRENT APPLICATION NUMBER: US/09/334,923A
; CURRENT FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 08/208,339
; PRIOR FILING DATE: 1994-03-08
; PRIOR APPLICATION NUMBER: US 08/446,881
; PRIOR FILING DATE: 1995-05-05
; PRIOR APPLICATION NUMBER: US 08/465,682
; PRIOR FILING DATE: 1995-06-06
; PRIOR APPLICATION NUMBER: US 08/468,775
; PRIOR FILING DATE: 1995-06-06
; PRIOR APPLICATION NUMBER: US 07/722,719
; PRIOR FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-923A-6

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QY 83 WVKMILNKLQ 93
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Db 61 WVRDSMKHLDQ 71

RESULT 15

US-09-834-795A-34
; Sequence 34, Application US/09834795A
; Patent No. US20020076710A1
; GENERAL INFORMATION:
; APPLICANT: Lawrence, Papsidero
; APPLICANT: Lyn, Dyster
; APPLICANT: Jana, Frustaci
; TITLE OF INVENTION: Detection and Treatment of Breast Cancer
; FILE REFERENCE: 3380/11127-US3
; CURRENT APPLICATION NUMBER: US/09/834,795A
; CURRENT FILING DATE: 2001-04-12
; PRIOR APPLICATION NUMBER: 09/146,580
; PRIOR FILING DATE: 1998-09-03
; PRIOR APPLICATION NUMBER: 60/071,899
; PRIOR FILING DATE: 1998-01-20
; PRIOR APPLICATION NUMBER: 60/092,155
; PRIOR FILING DATE: 1998-07-09
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 34
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-834-795A-34

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Best Local Similarity 35.28; Pred. No. 1.9e-10;
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QY 61 PRPGVLLTFRDKKEICADPRVPVVKMILNKL 91
|:||||| | : : |||| | | : : |
Db 55 KPFGVILLTKRGRODCADPNKKVQKYISDL 85

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Job time : 14.6996 secs

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 106.676 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-2
Perfect score: 489
Sequence: 1 MARLQALLVLLVLAVALQ.....EICADPRVPVVKMILKLSQ 93

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	489	100.0	93	1 PCT-US00-00953-6	Sequence 6, Appli
2	489	100.0	93	8 US-08-464-594-2	Sequence 2, Appli
3	489	100.0	93	8 US-08-479-620-2	Sequence 2, Appli
4	489	100.0	93	9 US-08-558-658-2	Sequence 2, Appli
5	489	100.0	93	11 US-08-760-127-3	Sequence 3, Appli
6	489	100.0	93	12 US-08-820-364-2	Sequence 2, Appli

7	489	100.0	93	13 US-08-925-857-12	Sequence 12, Appli
8	489	100.0	93	13 US-08-931-764-2	Sequence 2, Appli
9	489	100.0	93	13 US-08-931-764B-2	Sequence 2, Appli
10	489	100.0	93	13 US-08-939-107-2	Sequence 2, Appli
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13	489	100.0	93	14 US-09-067-447B-2	Sequence 2, Appli
14	489	100.0	93	19 US-09-509-165A-2	Sequence 2, Appli
15	489	100.0	93	19 US-09-591-992-2	Sequence 2, Appli
16	489	100.0	93	21 US-09-712-726-2	Sequence 2, Appli
17	489	100.0	93	21 US-09-791-537-22726	Sequence 23726, A
18	489	100.0	93	22 US-09-811-088-2	Sequence 2, Appli
19	489	100.0	93	22 US-09-837-446-6	Sequence 6, Appli
20	489	100.0	100	21 US-09-760-476-2007	Sequence 2007, Ap
21	489	100.0	100	21 US-09-760-481-204	Sequence 204, App
22	489	100.0	100	26 US-10-216-245-2007	Sequence 2007, Ap
23	489	100.0	100	26 US-10-216-388-204	Sequence 204, App
24	489	100.0	100	26 US-10-217-651-449	Sequence 449, App
25	484	99.0	93	1 PCT-US00-30237-2	Sequence 2, Appli
26	484	99.0	93	13 US-08-986-188-2	Sequence 2, Appli
27	484	99.0	93	18 US-09-432-768-2	Sequence 2, Appli
28	484	99.0	93	18 US-09-484-221-2	Sequence 2, Appli
29	484	99.0	93	23 US-09-908-599-2	Sequence 2, Appli
30	484	99.0	93	23 US-09-908-600-2	Sequence 2, Appli
31	484	99.0	93	25 US-10-137-438-2	Sequence 2, Appli
32	484	99.0	93	27 US-60-032-432-2	Sequence 2, Appli
33	480	98.2	93	14 US-09-067-447-41	Sequence 41, Appl
34	480	98.2	93	14 US-09-067-447-41	Sequence 41, Appl
35	480	98.2	93	19 US-09-509-165A-41	Sequence 41, Appl
36	463	94.7	93	19 US-09-509-165A-46	Sequence 46, Appl
37	457	93.5	86	13 US-08-925-857-10	Sequence 10, Appl
38	445	91.0	93	9 US-08-558-658-25	Sequence 25, Appl
39	445	91.0	93	13 US-08-939-107-25	Sequence 25, Appl
40	445	91.0	93	14 US-09-067-447-25	Sequence 25, Appl
41	445	91.0	93	14 US-09-067-447-25	Sequence 25, Appl
42	445	91.0	93	14 US-09-067-447B-25	Sequence 25, Appl
43	445	91.0	93	19 US-09-509-165A-25	Sequence 25, Appl
44	386	78.9	69	27 US-60-412-866-1	Sequence 1, Appli
45	386	78.9	70	13 US-08-939-107-30	Sequence 30, Appl

ALIGNMENTS

RESULT 1 1 PCT-US00-00953-6
; Sequence 6, Application PC/TUS00000953
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
; FILE REFERENCE: TARC IN SKIN LYMPHOCYTE HOMING
; CURRENT APPLICATION NUMBER: PCT/US00/00953
; CURRENT FILING DATE: 2000-01-14
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US00-00953-6

Query Match 100.0%; Score 489; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARLQALLVLLVLAVALQATEAGPYGANNMEDSVCCRDYRVRLPLRVVKHFWTSDSC 60
Db 1 MARLQALLVLLVLAVALQATEAGPYGANNMEDSVCCRDYRVRLPLRVVKHFWTSDSC 60

QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 2

US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 100.0%; Score 489; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHYFTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
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Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 3

US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago

; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,620
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32628
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-620-2

Query Match 100.0%; Score 489; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 1 MARLQTLVVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHYFTSDSC 60
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Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 4

US-08-558-658-2
; Sequence 2, Application US/08558658
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/558,658
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33009

```

Db      61  PRPGVLLTRDKECADPRVPWVKMILNKLQ 93
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RESULT 6
US-08-820-364-2
; Sequence 2, Application US/08820364
; GENERAL INFORMATION:
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR
; NUMBER OF SEQUENCES: 6
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/820,364
; FILING DATE: 12-MAR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L.
; REGISTRATION NUMBER: 35,283
; REFERENCE/DOCKET NUMBER: 07334/023001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-820-364-2
;
; Query Match 100.0%; Score 489; DB 12;
; Best Local Similarity 100.0%; Pred. No. 4.8e-51;
; Matches 93; Conservative 0; Mismatches 0;

Qy      1  MARLQALLVLLVLLAVALQATEAGPYGNMDESVCCRDY
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Db      1  MARLQALLVLLVLLAVALQATEAGPYGNMDESVCCRDY
|||||
Qy      61  PRPGVLLTRDKECADPRVPWVKMILNKLQ 93
|||||
Db      61  PRPGVLLTRDKECADPRVPWVKMILNKLQ 93
|||||

RESULT 7
US-08-925-857-12
; Sequence 12, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATE
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California

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COUNTRY: USA
ZIP: 94304-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724
FILING DATE: 10-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0614K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-925-857-12

Query Match 100.0%; Score 489; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93

RESULT 8
US-08-931-764-2
Sequence 2, Application US/08931764
GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC)
TITLE OF INVENTION: AS AN ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
TITLE OF INVENTION: OF LENTIVIRUS INFECTION
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/931,764
FILING DATE: To be assigned
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Mirostock, S. Leslie

REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 8769-029
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
TELEFAX: 212-869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-931-764-2
Query Match 100.0%; Score 489; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
RESULT 9
US-08-931-764B-2
Sequence 2, Application US/08931764B
GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-Viral
TITLE OF INVENTION: Agent for the Treatment and Prevention of Lentivirus
FILE REFERENCE: MDC
CURRENT APPLICATION NUMBER: US/08/931,764B
CURRENT FILING DATE: 1997-09-16
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
US-08-931-764B-2
Query Match 100.0%; Score 489; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNLSQ 93
RESULT 10
US-08-939-107-2
Sequence 2, Application US/08939107
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
NUMBER OF SEQUENCES: 40


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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-067-447B-2

Query Match      100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARLQATLLVLLVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 61 PRGVVLLTFRDKEICADPRVPWVKMILNLSQ 93
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRGVVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 13
US-09-067-447B-2
; Sequence 2, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantray, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY:
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; LOCATION:
; OTHER INFORMATION: /note = "human MDC"
US-09-067-447B-2

Query Match      100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQATLLVLLVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 61 PRGVVLLTFRDKEICADPRVPWVKMILNLSQ 93
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRGVVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 14
US-09-509-165A-2
; Sequence 2, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: US/09/509,165A
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-509-165A-2

Query Match      100.0%; Score 489; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARLQATLLVLLVLLAVALQATAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSC 60
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 61 PRGVVLLTFRDKEICADPRVPWVKMILNLSQ 93
   ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRGVVLLTFRDKEICADPRVPWVKMILNLSQ 93

RESULT 15
US-09-591-992-2
; Sequence 2, Application US/09591992
; GENERAL INFORMATION:
; APPLICANT: Gallo, Robert C.
; APPLICANT: Devico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP
; CURRENT APPLICATION NUMBER: US/09/591,992
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
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; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-591-992-2

Query Match 100.0%; Score 489; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.8e-51;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARLQTALLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLQTALLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLQ 93
Db 61 PRPGVLLTFRDKKEICADPRVPWVKMILNKLQ 93

Search completed: July 28, 2003, 04:14:53
Job time : 108.676 secs

Result No.	Query %			DB	ID	Description
	Score	Match	Length			
1	489	100.0	93	2	PCT-US02-35606-109	Sequence 109, App
2	489	100.0	93	2	PCT-US02-35606-146	Sequence 146, App
3	489	100.0	93	2	PCT-US02-40891-473	Sequence 473, App
4	489	100.0	93	2	PCT-US02-40891-549	Sequence 549, App
5	489	100.0	93	2	PCT-US02-40891-638	Sequence 638, App
6	489	100.0	93	2	PCT-US02-40891-639	Sequence 639, App
7	489	100.0	93	2	PCT-US02-40891-640	Sequence 640, App
8	489	100.0	93	2	PCT-US02-40891-641	Sequence 641, App
9	489	100.0	93	12	US-10-314-410-2	Sequence 2, Appli
10	489	100.0	93	12	US-10-405-027-5105	Sequence 5105, Ap
11	489	100.0	93	12	US-10-445-790-2	Sequence 2, Appli
12	489	100.0	93	14	US-60-453-135-8659	Sequence 8659, Ap
13	489	100.0	93	14	US-60-453-050-8659	Sequence 8659, Ap
14	489	100.0	93	14	US-60-455-444-4765	Sequence 4765, Ap
15	489	100.0	93	14	US-60-465-241-4765	Sequence 4765, Ap
16	489	100.0	93	14	US-60-466-412-8659	Sequence 8659, Ap
17	484	99.0	93	12	US-10-285-573-2	Sequence 2, Appli
18	484	99.0	93	12	US-10-137-438A-2	Sequence 2, Appli
19	484	99.0	93	12	US-10-406-494-2	Sequence 2, Appli


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; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match      100.0%; Score 489; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQTALLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Db 1 MARLQTALLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||

Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||

RESULT 9
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearling, David P.
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2
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Query Match      100.0%; Score 489; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQTALLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARLQTALLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||

Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||

RESULT 10
US-10-405-027-5105
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: Patentin ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match      100.0%; Score 489; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQTALLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARLQTALLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||

Qy 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNLSQ 93
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||

RESULT 11
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines In DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2
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Query Match 100.0%; Score 489; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 12
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: IAKOUBOVA, Olga
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-135-8659

Query Match 100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 13
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: LUKE, May
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-050-8659

Query Match 100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 14
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-455-444-4765

Query Match 100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

RESULT 15
US-60-465-241-4765
; Sequence 4765, Application US/60465241
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001468
; CURRENT APPLICATION NUMBER: US/60/465,241
; CURRENT FILING DATE: 2003-04-23
; NUMBER OF SEQ ID NOS: 258418
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-465-241-4765

Query Match 100.0%; Score 489; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Db 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93
Db 61 PRPGVLLTFRDKEICADPRVPWVKMILNKLQ 93

Search completed: July 28, 2003, 04:18:49
Job time : 34.8235 secs

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 4.88445 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-2

Perfect score: 489

Sequence: 1 MARLQATALLVLLVALQ.....EICADPRVPWVKMILNKLQ 93

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	489	100.0	93	1 SY22_HUMAN	O00626 homo sapien
2	334	68.3	92	1 SY22_MOUSE	O88430 mus musculus
3	160.5	32.8	90	1 SY04_CHICK	Q90826 gallus gall
4	159	32.5	89	1 SY18_HUMAN	P55774 h small ind
5	156	31.9	92	1 SY03_RAT	P50229 rattus norv
6	151.5	31.0	91	1 SY05_HUMAN	P13501 homo sapien
7	147	30.1	91	1 SY05_MOUSE	P30882 mus musculus
8	146.5	30.0	92	1 SY03_MOUSE	P10855 mus musculus
9	146.5	30.0	92	1 SY05_RAT	P50231 rattus norv
10	144.5	29.6	104	1 SY12_MOUSE	O62401 mus musculus
11	142.5	29.1	91	1 SY05_CAVPO	P97272 cavia porce
12	141	28.8	93	1 SY14_HUMAN	Q16627 homo sapien
13	140.5	28.7	92	1 SY04_RAT	P50230 rattus norv
14	138.5	28.3	92	1 SY04_HUMAN	P13236 h small ind
15	136	27.8	92	1 SY03_HUMAN	P10147 homo sapien
16	136	27.8	93	1 SY3L_HUMAN	P16619 homo sapien
17	135.5	27.7	91	1 SY05_BOVIN	O97919 bos taurus
18	134	27.4	94	1 VNI2_KSHV	Q98157 kaposi's sa
19	133.5	27.3	92	1 SY04_MOUSE	P14097 mus musculus
20	131	26.8	99	1 SY08_HUMAN	P80075 homo sapien
21	130	26.6	120	1 SY02_CAVPO	Q08782 cavia porce
22	128.5	26.3	94	1 SY17_HUMAN	Q92583 homo sapien
23	127.5	26.1	99	1 SY07_HUMAN	P80098 homo sapien
24	126	25.8	113	1 SY15_HUMAN	Q16663 homo sapien
25	123.5	25.3	98	1 SY13_HUMAN	Q99616 homo sapien
26	121	24.7	98	1 SY19_HUMAN	Q99731 homo sapien
27	118.5	24.2	70	1 REGL_BOVIN	P82943 bos taurus
28	118.5	24.2	92	1 SY04_RABIT	P46632 oryctolagus
29	118.5	24.2	108	1 SY19_MOUSE	O70460 mus musculus
30	117	23.9	99	1 SY02_HUMAN	P13500 homo sapien
31	116	23.7	99	1 MCPA_BOVIN	P28291 bos taurus
32	116	23.7	99	1 SY02_MACFA	Q9ymn4 macaca fasc
33	116	23.7	99	1 SY08_PIG	P49873 sus scrofa

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	SCYA22 OR MDC OR A-152E5.1.			
GN	Homo sapiens (Human).			
OS	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OC				
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.;			
RA	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97460113; PubMed=9312138;			
RA	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.;			
RA	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99493829; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R., Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RA	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Pancreas, and Spleen;			
RC	Strausberg R.;			
RX	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RL	[5]			
RN	RECEPTOR INTERACTION.			
RP	MEDLINE=98104166; PubMed=9430724;			
RX	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., Yoshie O., Gray P.W.;			
RA	"Macrophage-derived chemokine is a functional ligand for the CC			

P52203 canis fami
P51671 homo sapien
O91kc0 mus musculu
O00175 homo sapien
P14844 rattus norv
O89093 mus musculu
Q92121 mus musculu
O9y258 homo sapien
Q09141 bos taurus
O00585 homo sapien
O15467 h small ind
P42831 sus scrofa

ALIGNMENTS

34 115 23.5 101 1 SY02_CANFA
35 114 23.3 97 1 E0TA_HUMAN
36 113 23.1 119 1 SY24_MOUSE
37 112 22.9 119 1 SY24_HUMAN
38 112 22.9 148 1 SY02_RAT
39 111 22.7 97 1 SY20_MOUSE
40 109.5 22.4 97 1 SY08_MOUSE
41 107.5 22.0 94 1 SY26_HUMAN
42 107 21.9 99 1 SY08_BOVIN
43 107 21.9 134 1 SY21_HUMAN
44 105.5 21.6 120 1 SY16_HUMAN
45 105 21.5 99 1 SY02_PIG

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chemokine receptor 4."
RL J. Biol. Chem. 273:1764-1768(1998).
CC -|- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
-----
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entities requires a license agreement (See http://www.isb-sib.ch/announce/
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DR EMBL; U83171; AAB58360.1;
DR EMBL; U83239; AAB53372.1;
DR EMBL; AC004382; AAC24306.1;
DR EMBL; BC027952; AAH27952.1;
DR HSSP; Q98157; ICM9.
DR MIM; 602957; SCYA22.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 24
FT CHAIN 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 100.0%; Score 489; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 3.1e-48; Indels 0; Gaps 0;
Matches 93; Conservative 0; Mismatches 0;

QY 1 MARLQTALLVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
DB 1 MARLQTALLVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93
DB 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 93

RESULT 2
SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;

```

```

[1]
RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=9835331; PubMed=9687523;
RA Schaniel C., Pardoll E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -|- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
-----
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-----
DR EMBL; AF052505; AAC40200.1;
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859861CDRAE07CA CRC64;

Query Match 68.3%; Score 334; DB 1; Length 92;
Best Local Similarity 64.1%; Pred. No. 8.2e-31;
Matches 59; Conservative 19; Mismatches 14; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
DB 1 MATLRVPLLVLLVLLVLAVALQTSADAGPYGANVEDSICCDYIRHPLPSRLVKEFFWTSSK 60
QY 61 PRPGVLLTFRDKEICADPRVPVWKMLNKLQ 92
DB 61 RKPQVLLTVNRNDRICADPRQVWVKLLHKLQ 92

RESULT 3
SY04_CHICK STANDARD; PRT; 90 AA.
AC Q90826; Q910C9;
DT 01-NOV-1997 (Rel. 35, Created)
DT 15-JUN-2002 (Rel. 41, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
DE protein 1-beta homolog).
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.

```

```
RC TISSUE=Bone marrow;
RX MEDLINE=95369710; PubMed=7642115;
RA Petrenko O., Ischenko I., Enrietto P.J.;
RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
RL mammalian macrophage inflammatory protein-1 beta.";
RN Gene 160:305-306(1995).
RP [2]
RN SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RL chemokine SCYA4.";
RN Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
RN [3]
RN SEQUENCE OF 14-90 FROM N.A.
RA Petrenko O., Enrietto P.J.;
RL Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
CC (BY SIMILARITY).
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; L34553; AAA48747.1; -.
DR EMBL; AJ243034; CAB45103.1; -.
DR HSSP; P13236; IHUM.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_il8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 21 BY SIMILARITY.
FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
FT DISULFID 32 56 BY SIMILARITY.
FT DISULFID 33 72 BY SIMILARITY.
FT CONFLICT 87 87 M -> L (IN REF. 1).
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
Query Match 32.88; Score 160.5; DB 1; Length 90;
Best Local Similarity 38.28; Pred. No. 2.6e-11;
Matches 34; Conservative 18; Mismatches 34; Indels 3; Gaps 3;
QY 3 RLQTALLVLLVLAVALAQLAATEAGPYGANMEDSVCCRRDYVRLPLRVVVKHFWYTSQCP 62
Db 2 KVSVAALAVL-LIAICVQ-TSAAPVSDPPTS-CCFTYISRLQPLFFSEVADYIETNSQCPH 58
QY 63 PGVLLTFRDKKICADPRVPWVKMLNKL 91
Db 59 AGVVFITRKREVCANPENDWQDYNNKM 87
RESULT 4
SY18_HUMAN
ID SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DE 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCIL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine 1) (AMAC-1) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
```

```
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RN SEQUENCE FROM N.A.
RA Li H., Ruben S.;
RT "Macrophage inflammatory protein-3 and -4.";
RL Patent number US5504003, 02-APR-1996.
RN [2]
RN SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
RX TISSUE=Aorta, and Lung;
RX MEDLINE=97376836; PubMed=9233607;
RA Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
RA Miura R., Odenakker G., van Damme J., Yoshie O., Nomiya H.;
RT "A novel human CC chemokine PARC that is most homologous to
RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
RT T lymphocytes, but not for monocytes.";
RL J. Immunol. 159:1140-1149(1997).
RN [3]
RN SEQUENCE FROM N.A.
RX MEDLINE=98230488; PubMed=9570561;
RA Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerd S.;
RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
RT structural homologue of macrophage inflammatory protein-1 alpha with
RT a Th2-associated expression pattern.";
RL J. Immunol. 160:1411-1418(1998).
RN [4]
RN DISCUSSION OF SEQUENCE.
RX MEDLINE=97275308; PubMed=9129202;
RA Wells T.N.C., Peitsch M.C.;
RT "The chemokine information source: identification and characterization
RT of novel chemokines using the WorldWideWeb and expressed sequence tag
RT databases.";
RL J. Leukoc. Biol. 61:545-550(1997).
RN [5]
RN SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
RX TISSUE=Dendritic cell;
RX MEDLINE=97336102; PubMed=912987;
RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
RA Figdor C.G.;
RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
RT naive T cells.";
RL Nature 387:713-717(1997).
RN [6]
RN SEQUENCE FROM N.A.
RX MEDLINE=99168908; PubMed=10049593;
RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
RA Hughes A.L., Nomiya H.;
RT "Chemokine PARC gene (SCYA18) generated by fusion of two
RT MIP-1alpha/LD78alpha-like genes.";
RL Genomics 55:353-357(1999).
RN [7]
RN SEQUENCE FROM N.A., AND CHARACTERIZATION.
RX MEDLINE=99189237; PubMed=10087196;
RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
RA Neote K., McCall S.R.;
RT "Genomic organization and biological characterization of the novel
RT human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18.";
RL Genomics 56:296-302(1999).
RN [8]
RN SEQUENCE FROM N.A.
RA Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerd S.;
RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
RT within the first intron sequence.";
RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES,
CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
```

CC AND THIS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,
 CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOID
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 CC EMBL; AB000221; BAA21670.1; -
 CC EMBL; Y13710; CAA74039.1; -
 CC EMBL; AB012113; BAA34368.1; -
 CC EMBL; AF082214; AAC32287.1; -
 CC EMBL; AF082212; AAC32287.1; JOINED.
 CC EMBL; AF082213; AAC32287.1; JOINED.
 CC EMBL; AF111198; AAD30390.1; -
 CC HSSP; P13236; 1HUM.
 CC Genew; HGNC:10616; SCYA18.
 CC MIM: 603757; -
 CC InterPro; IPR000827; CC_chemkine_sml.
 CC InterPro; IPR001811; Chemokine_IL8.
 CC Pfam; PF00048; IL8; 1.
 CC SMART; SM00199; SCY; 1.
 CC Cytokine; Chemotaxis; Inflammatory response; Signal.
 CC KW PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 CC FT SIGNAL 1 20 SMALL INDUCIBLE CYTOKINE A18.
 CC FT CHAIN 21 89 BY SIMILARITY.
 CC FT DISULFID 30 54 BY SIMILARITY.
 CC FT DISULFID 31 70 BY SIMILARITY.
 CC FT SEQUENCE 89 AA; 9849 MW; C287B94B9C0518E4 CRC64;
 CC -----
 CC Query Match 32.5%; Score 159; DB 1; Length 89;
 CC Best Local Similarity 36.3%; Pred. No. 3.8e-11;
 CC Matches 33; Conservative 18; Mismatches 34; Indels 6; Gaps 2;
 QY 1 MARLTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60
 Db 1 MKGLAALLVLLVCTNALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
 QY 61 PRPGVLLTFRDKETCADRPVWVKMILNKL 91
 Db 55 PRPGVLLTFRDKETCADRPVWVKMILNKL 85
 RESULT 5
 SY03_RAT STANDARD; PRT; 92 AA.
 AC P50229;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha).
 GN SCYA3 OR MIP1A.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Rattus.

OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=CD-1; TISSUE=Lung;
 RX MEDLINE=95298037; PubMed=7779098;
 RA Shi M.M., Godleski J.J., Paulauskis J.D.;
 RT "Molecular cloning and posttranscriptional regulation of macrophage
 RL inflammatory protein-1 alpha in alveolar macrophages.";
 RL Biochem. Biophys. Res. Commun. 211:289-295(1995).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Long Evans; TISSUE=Lung;
 RX MEDLINE=95238980; PubMed=772328;
 RA Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.;
 RT "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
 RT acute lung injury in rats.";
 RL J. Immunol. 154:4793-4802(1995).
 RN [3]
 RP SEQUENCE OF 24-57.
 RC STRAIN=Wistar;
 RX MEDLINE=96183056; PubMed=8607872;
 RA Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
 RT "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
 RT lipopolysaccharide-stimulated rat macrophages in culture.";
 RL Biochem. Biophys. Res. Commun. 220:945-948(1996).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
 CC HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
 CC BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA
 CC PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
 CC MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
 CC PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
 CC ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFUX. THIS PROTEIN
 CC BINDS HEPARIN.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 CC EMBL; U22414; AAA80608.1; -
 CC EMBL; U06435; AAA96498.1; -
 CC HSSP; P13236; 1HUM.
 CC InterPro; IPR000827; CC_chemkine_sml.
 CC InterPro; IPR001811; Chemokine_IL8.
 CC Pfam; PF00048; IL8; 1.
 CC SMART; SM00199; SCY; 1.
 CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 CC Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
 FT SIGNAL 1 23 SMALL INDUCIBLE CYTOKINE A3.
 FT CHAIN 24 92 BY SIMILARITY.
 FT DISULFID 34 57 BY SIMILARITY.
 FT DISULFID 35 73 BY SIMILARITY.
 FT CONFLICT 6 6 A -> T (IN REF. 2).
 FT CONFLICT 57 57 C -> W (IN REF. 2 AND 3).
 FT SEQUENCE 92 AA; 10335 MW; 14E861C647F9A2EB CRC64;
 SQ
 Query Match 31.9%; Score 156; DB 1; Length 92;
 Best Local Similarity 34.8%; Pred. No. 8.5e-11;
 Matches 31; Conservative 21; Mismatches 33; Indels 2; Gaps 2;
 QY 3 RIQTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPR 62
 Db 2 KVSSTAALVLLCTMALNWEVSAPYAGD-TPTACCFSGYR-QIPRKFADIYFETSSLSQ 59
 QY 63 PGVLLTFRDKETCADRPVWVKMILNKL 91

Db
60 PGVIFLTNRNRQICADPKETWVOEYITEL 88

RESULT 6

ID	SY05_HUMAN	STANDARD;	PRT;	91 AA.
OS	SY05_HUMAN	STANDARD; PRT;	91 AA.	
OC	P13501; O43646; Q9NYA2;			
DT	01-JAN-1990 (Rel. 13, Created)			
DT	15-JUN-1999 (Rel. 38, Last sequence update)			
DT	15-JUL-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (T cell-specific protein P228) (TCP228).			
GN	SCYA5.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
NCBI_TaxID=9606;				
RN	[1]			
RX	SEQUENCE FROM N.A.			
RP	MEDLINE=88285659; PubMed=2456327;			
RR	Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C.,			
RA	Davis M.M., Krensky A.M.;			
RT	"A human T cell-specific molecule is a member of a new gene family.";			
RT	J. Immunol. 141:1018-1025(1988).			
RL	[2]			
RN	SEQUENCE FROM N.A.			
RP	Jang J.S., Kim B.E.;			
RR	Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99228475; PubMed=10213461;			
RR	Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;			
RT	"Organization of the chemokine gene cluster on human chromosome			
RT	17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and			
RT	RANTES.";			
RT	J. Interferon Cytokine Res. 19:227-234(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	Zeng Q.P., Yang R.Y., Fu L.C.;			
RR	"The complete sequence of human beta-chemokine RANTES mRNA.";			
RT	Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.			
RL	[5]			
RN	SEQUENCE FROM N.A.			
RP	Trautwein R.;			
RC	TISSUE=Brain;			
RR	Strausberg R.;			
RL	Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.			
RN	[6]			
RN	SEQUENCE OF 49-56: 71-79 AND 83-91, AND FUNCTION.			
RX	MEDLINE=96106406; PubMed=8525373;			
RA	Cocchi F., Devico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,			
RA	Lusso P.;			
RT	"Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major			
RT	HIV-suppressive factors produced by CD8+ T cells.";			
RT	Science 270:1811-1815(1995).			
RN	[7]			
RN	STRUCTURE BY NMR.			
RP	MEDLINE=9532612; PubMed=7542919;			
RR	Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;			
RT	"The three-dimensional solution structure of RANTES.";			
RT	Biochemistry 34:9307-9314(1995).			
RL	[8]			
RN	STRUCTURE BY NMR.			
RP	MEDLINE=95244456; PubMed=7537088;			
RR	Skelton N.J., Aspiras F., Ogez J., Schall T.J.;			
RT	"Proton NMR assignments and solution conformation of RANTES, a			
RT	chemokine of the C-C type.";			
RT	Biochemistry 34:5329-5342(1995).			
RL	[9]			
RN	SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).			
RP	MEDLINE=99111238; PubMed=9889151;			
RR	Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,			
RA	Picard L., Wlodawer A., Lubkowski J., Kent S.B.;			

Db 2 KISAAASITVLVAAALCTPVPASPGS--DTTPCCFAYLSIALPRAHVKEYFYTSKCS 59

QY 62 RGVVLLTFRDKEICADPRVPVWKMILNKL 91

Db 60 NLAVVFTVRNRQVCANKEKWKQYINYL 89

RESULT 10

SY12_MOUSE STANDARD; PRT; 104 AA.

AC 062401; Q9QYD6;

DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 15-JUN-2002 (Rel. 41, Last annotation update)

DE Small inducible cytokine A12 precursor (CCL12) (Monocyte chemotactic protein 5) (MCP-5) (MCP-1 related chemokine).

DE SCYAL2 OR MCP5.

GN Mus musculus (Mouse).

OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

OX NCBI_TaxID=10090;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=97079149; PubMed=8920881;

RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C., Wershil B.K., Gutierrez-Ramos J.C.;

RT "Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation.";

RL J. Exp. Med. 184:1939-1951(1996).

RN [2]

RX SEQUENCE FROM N.A.

RX MEDLINE=97149438; PubMed=8996246;

RA Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;

RT "Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human MCP-1.";

RL J. Exp. Med. 185:99-109(1997).

RN [3]

RP SEQUENCE FROM N.A.

RC STRAIN=B10.S/J, BALB/C, DBA/2J, NOD/LTJ, and SJL/J; TISSUE=Spleen;

RX MEDLINE=99370037; PubMed=10438970;

RA Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W., Blankenhorn E.P.;

RT "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scyal2 (monocyte chemoattractant protein (MCP)-1), and Scyal12 (MCP-5) are candidates for eae7, a locus controlling susceptibility to monophasic remitting/nonrelapsing experimental allergic encephalomyelitis.";

RL J. Immunol. 163:2262-2266(1999).

CC -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES, AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.

CC -!- SUBUNIT: HOMODIMER (BY SIMILARITY).

CC -!- SUBCELLULAR LOCATION: Secreted.

CC -!- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES, BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

CC -!- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).

CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

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EMBL; U50712; AAB50053.1; -

DR EMBL; U66670; AAB49424.1; -

DR EMBL; AF05934; AAF15384.1; -

DR EMBL; AF065935; AAF15385.1; -

DR EMBL; AF065936; AAF15386.1; -

DR EMBL; AF065937; AAF15387.1; -

DR EMBL; AF065938; AAF15388.1; -

DR HSP; P13500; IDOL.

DR MGD; MGI:108224; Scyal2.

DR InterPro; IPR000827; CC_chemokine_sml.

DR InterPro; IPR001811; Chemokine_IL8.

DR Pfam; PF00048; IL8; 1.

DR SMART; SM00199; SCY; 1.

DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

KW Cytokine; Chemotaxis; Signal; Inflammatory response.

FT SIGNAL 1 22 BY SIMILARITY.

FT CHAIN 23 104 SMALL INDUCIBLE CYTOKINE A12.

FT DISULFID 33 58 BY SIMILARITY.

FT DISULFID 34 74 BY SIMILARITY.

FT VARIANT 94 104 QTFLEPSCLG -> RT (IN STRAIN SJL/J).

SQ SEQUENCE 104 AA; 11659 MW; 8D102F4FC3DBF CRC64;

Query Match 29.6%; Score 144.5; DB 1; Length 104;

Best Local Similarity 35.1%; Pred. No. 1.9e-09;

Matches 34; Conservative 19; Mismatches 31; Indels 13; Gaps 4;

QY 3 RLPQALLVLLVAVALQATGAPYGANMEDSV-----CCRDYVRYRLPLRVVKHF-YWT 56

Db 2 KISTLLCLLIATTISQVL-AGP-----DAVSTPTCCYNNVVKQIHVRKLKSYRRIT 54

QY 57 SDSCPRPGVLLTFRDKEICADPRVPVWKMILNKL 93

Db 55 SSQCPREAVIFRTILDKEICADPKKWKVNSINHLDR 91

RESULT 11

SY05_CAVPO STANDARD; PRT; 91 AA.

ID SY05_CAVPO

AC P97272; O09076;

DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 15-JUN-2002 (Rel. 41, Last annotation update)

DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).

DE SCYA5.

GN SCYA5.

OS Cavia porcellus (Guinea pig).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.

OX NCBI_TaxID=10141;

RN [1]

RP SEQUENCE FROM N.A.

RC STRAIN=Dunkin-Hartley;

RA Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B., Wells T.N.C., White A.M., Westwick J., Watson M.L.;

RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.

RN [2]

RP SEQUENCE FROM N.A.

RC TISSUE=Lung;

RA Asano K., Nakamura M., Oguma T., Fukunaga K., Ishizaka A., Yamaguchi K., Kanazawa M.;

RL Submitted (APR-1997) to the EMBL/GenBank/DBJ databases.

CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).

CC -!- SUBCELLULAR LOCATION: Secreted.

CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

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EMBL; U50712; AAB50053.1; -

DR EMBL; U66670; AAB49424.1; -

DR EMBL; AF05934; AAF15384.1; -

CC DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
CC AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
CC -1- SUBUNIT: HOMODIMER.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- INDUCTION: BY MITOGENS.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; M23502; AAA36656.1; -;
CC EMBL; M25316; AAA57256.1; -;
CC EMBL; J04130; AAA51576.1; -;
CC EMBL; X53683; CAA37723.1; -;
CC EMBL; X53682; CAA37722.2; ALT_SEQ.
CC EMBL; X16166; CAA34291.1; -;
CC EMBL; M69203; AAB00790.1; -;
CC EMBL; M69201; AAB00790.1; JOINED.
CC EMBL; M69202; AAB00790.1; JOINED.
CC EMBL; AC003976; -; NOT_ANNOTATED_CDS.
CC EMBL; M57503; AAA36752.1; -;
CC PIR; A31767; A31767.
CC PIR; B30574; B30574.
CC PIR; D30552; D30552.
CC PIR; JH0319; JH0319.
CC PIR; A37411; A37411.
CC PDB; 1HUM; 30-APR-94.
CC Genew; HGNC:10630; SCYA4.
CC MIM; 182284; -;
CC InterPro; IPR000827; CC_chemokine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCY; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal; 3D-structure.
FT SIGNAL 1 23
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A4.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
FT CONFLICT 6 6 T -> C (IN REF. 7).
FT CONFLICT 15 15 A -> S (IN REF. 6).
FT CONFLICT 20 20 P -> L (IN REF. 2).
FT CONFLICT 40 45 ARKLPR -> REASS (IN REF. 3).
FT CONFLICT 56 56 S -> I (IN REF. 8).
FT CONFLICT 70 70 S -> G (IN REF. 6).
FT CONFLICT 80 80 S -> T (IN REF. 7 AND 8).
FT STRAND 29 29
FT STRAND 33 33
FT STRAND 45 47
FT STRAND 50 53
FT STRAND 63 66
FT STRAND 72 75
FT TURN 77 78
FT HELIX 80 90
SQ SEQUENCE 92 AA; 10212 MW; F2EA7CF341B0E258 CRC64;

Query Match 28.3%; Score 138.5; DB 1; Length 92;
Best Local Similarity 34.9%; Pred. No. 7.9e-09;
Matches 29; Conservative 15; Mismatches 38; Indels 1; Gaps 1;

QY 3 RLQATLLVVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFWYVTSQCP 62
Db 2 KLCVTVLSLMLVAFCSPALSGMSD-PPTACCFSTYARKLPFRNFVVDYETSSLSQ 60
QY 63 PGVLLTFRDKETCADPRVPWK 85
| | | | | : | | | | |

Db 61 PAVFQTKRSKQVCADPSESVMQ 83

RESULT 15
SY03_HUMAN
ID SY03_HUMAN STANDARD; PRT; 92 AA.
AC P10147;
DT 01-NAR-1989 (Rel. 10, Created)
DT 01-NAR-1989 (Rel. 10, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
DE protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha
DE protein) (G0/G1 switch regulatory protein 19-1) (GOS19-1 protein)
DE (SIS-beta) (PAT 464.1).
GN SCYA3 OR GOS19-1 OR MIP1A.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=86223879; PubMed=3086300;
RA Obaru K., Fukuda M., Maeda S., Shimada K.;
RT "A cDNA clone used to study mRNA inducible in human tonsillar
RT lymphocytes by a tumor promoter.";
RL J. Biochem. 99:885-894(1986).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=89140347; PubMed=2521882;
RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
RT "Mitogenic activation of human T cells induces two closely related
RT genes which share structural similarities with a new family of
RT secreted factors.";
RL J. Immunol. 142:1582-1590(1989).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=91103879; PubMed=2271120;
RA Blum S., Forsdyke R.E., Forsdyke D.R.;
RT "Three human homologs of a murine gene encoding an inhibitor of stem
RT cell proliferation.";
RL DNA Cell Biol. 9:589-602(1990).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=90287155; PubMed=1694014;
RA Nakao M., Nomiya H., Shimada K.;
RT "Structures of human genes coding for cytokine LD78 and their
RT expression.";
RL Mol. Cell. Biol. 10:3646-3658(1990).
RN [5]
RP SEQUENCE OF 23-92 FROM N.A.
RA Jang J.S., Kim B.E.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49.
RX MEDLINE=96127782; PubMed=8541527;
RA Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S.,
RA Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H.,
RA Heyworth C.M., Lord B.I., McCourt M., Varley P.G., Wood L.M.,
RA Edwards R.M., Lewis P.J.;
RT "BB-10010: an active variant of human macrophage inflammatory protein-
RT 1 alpha with improved pharmaceutical properties.";
RL Blood 86:4400-4408(1995).
RN [7]
RP SEQUENCE OF 27-40 AND 71-83, AND FUNCTION.
RX MEDLINE=96106406; PubMed=8525373;
RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
RA Lusso P.;
RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
RT HIV-suppressive factors produced by CD8+ T cells.";
RL Science 270:1811-1815(1995).
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC BINDS TO CCR1, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE
CC FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:28 ; Search time 17.1933 Seconds
(without alignments)
1114.528 Million cell updates

Title: US-09-509-165A-2
 Perfect score: 489
 Sequence: 1 MARIQTALLVVLVLLAVALQ.....EICADPRVPVVKNIILNKLSO 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

```

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                  Maximum Match 10%
                  Listing first 45

```

```

Database :
STREMBL_21.*
1:  sp_archaea.*
2:  sp_bacteria.*
3:  sp_fungi.*
4:  sp_human.*
5:  sp_invertebrate.*
6:  sp_mammal.*
7:  sp_mhc.*
8:  sp_Organelle.*
9:  sp_phage.*
10: sp_plant.*
11: sp_rodent.*
12: sp_virus.*
13: sp_vertebrate.*
14: sp_unclassified.*
15: sp_tvirus.*
16: sp_bacteriap.*
17: sp_archaea.*

```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query		Length	DB	ID	Description
		Match	%				
1	332	67.9	92	11	Q9QZU2	Q9QZU2	mus musculus
2	329	67.3	92	11	Q912H5	rattus norv	Q912H5
3	315	64.4	81	11	Q9QZU1	rattus norv	Q9QZU1
4	164	33.5	95	12	Q98158	kaposi's sa	Q98158
5	161.5	33.0	90	13	Q9PWA6	gallus gall	Q9PWA6
6	160.5	32.8	90	13	Q910C9	gallus gall	Q910C9
7	160	32.7	91	13	Q8QGS7	gallus gall	Q8QGS7
8	159.5	32.6	92	11	Q912L0	sigmodon hi	Q912L0
9	159	32.5	92	11	Q91265	sigmodon hi	Q91265
10	155	31.7	89	13	Q918E0	gallus gall	Q918E0
11	147	30.1	92	6	Q8SQ40	felis silve	Q8SQ40
12	142	28.0	93	6	Q8SQA6	bos taurus	Q8SQA6
13	139	28.4	93	11	Q912L1	sigmodon hi	Q912L1
14	136	27.8	93	4	Q96168	homo sapien	Q96168
15	135	27.6	99	6	Q95N01	canis fami	Q95N01
16	127.5	26.1	93	11	Q9WUZ6	mus musculu	Q9WUZ6

ALIGNMENTS

RESULT 1

Y02002	PRELIMINARY;	PRT;	92 AA.
ID	Q90202		
AC	Q90202;		
DT	01-MAY-2000 (TREMBLrel. 13; Created)		
DT	01-MAY-2000 (TREMBLrel. 13; Last sequence update)		
DT	01-JUN-2002 (TREMBLrel. 21; Last annotation update)		
DE	Macrophage-derived chemokine.		
SC	YAZ2.		
OS	Mus musculus (Mouse).		
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.		
OX	NBL_TaxID=10090;		
RN	[1]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=BALB/C;		
RA	Chantrý D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,		
RA	Gray P.W.;		
RT	"Macrophage derived chemokine is localized to thymic medullary		
RT	epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-		
RT	thymocytes."		
RL	Blood 0:0-0(1999).		
DR	EMBL; AF163476; AAD55763.1; -.		
DR	HSSP; Q98157; ICM9.		
DR	MGD; MGI:1306779; Scya22.		
DR	InterPro; IPR001811; Chemokine_IL8.		
DR	Tram; PF00048; IL8; 1.		
DR	SMART; SM00199; SCY; 1.		
SQ	SEQUENCE 92 AA; 10331 MW; 17FE31A87F352E63 CRC64;		

Query Match 67.9%; Score 332; DB 11; Length 92;
Best Local Similarity 63.0%; Pred. No. 1.4e-34;
Matches 58; Conservative 20; Mismatches 14; Indels

QY	1 MARLOTALLVLLVLLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRWKHFYWTSDSC 60
	: : : : : :
Dd	1 MGNLRVPLLVALVLLAVALQTSDAGPYGANVEDSICCDYTRHPLPSRLVKFEFFWTSKSC 60
QY	61 PRPGVVLTFRDKEICADPRVPWWKMILNKLS 92

Db 61 RKPGVLLITVKNRDICADPRQVWVKLLHLKLS 92
 :|||||:| :|||:| :|||:| :|||:| :|||:|

RESULT 2

Q912H5 Q912H5 PRELIMINARY; PRT; 92 AA.
 AC Q912H5;
 DT 01-DEC-2001 (TREMBlrel. 19, Created)
 DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
 DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
 DE Macrophage-derived chemokine CCL22.
 GN MDC.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=LEW;
 RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
 RA Bacon K.B., Feng L.;
 RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
 RT chemokine results in attenuation of developing crescentic
 RT glomerulonephritis";
 RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
 RL EMBL; AF432871; AAL30397.1;
 DR InterPro: IPR001811; Chemokine_IL8.
 DR Pfam: PF00048; IL8; 1.
 SQ SEQUENCE 92 AA; 10420 MW; C8C88124502EFC0C CRC64;

Query Match 67.3%; Score 329; DB 11; Length 92;
 Best Local Similarity 64.1%; Pred. No. 3.4e-34;

Matches 59; Conservative 17; Mismatches 16; Indels 0; Gaps 0;

QY 1 MARLTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVVKHFYWTSDSC 60
 |||:| | ||| ||| :|||||:| :|||:| :|||:| :|||:|

Db 1 MATLRVPLQVALVLLVALQSDAGPYGANVEDSICCQDYIRHPLPPRFVKEFYWTSCSK 60
 :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

QY 61 PRPGVLLITFRDKETCADPRVPVWVKMILNKL 92
 :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

Db 61 RKPGVLLITVKNRDICADPRMLWVKLLHLKLA 92
 :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

RESULT 3

Q902U1 Q902U1 PRELIMINARY; PRT; 81 AA.
 AC Q902U1;
 DT 01-MAY-2000 (TREMBlrel. 13, Created)
 DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
 DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)
 DE Macrophage-derived chemokine (Fragment).
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=SPRAGUE-DAWLEY; TISSUE=THYMUS;
 RA Chan'Y D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
 RA Gray P.W.;
 RT "Macrophage derived chemokine is localized to thymic medullary
 RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
 RT thymocytes";
 RL Blood 0:0-0(1999).
 DR EMBL; AF163477; AAD55764.1; -;
 DR HSPF; Q98157; ICM9.
 DR InterPro: IPR001811; Chemokine_IL8.
 DR Pfam: PF00048; IL8; 1.
 DR SMART: SM00199; SCY; 1.
 FT NON_TER 1
 SQ SEQUENCE 81 AA; 9212 MW; A0A7EDIA0045D80B CRC64;

Query Match 64.4%; Score 315; DB 11; Length 81;
 Best Local Similarity 67.9%; Pred. No. 1.8e-32;
 Matches 55; Conservative 16; Mismatches 10; Indels 0; Gaps 0;

QY 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
 ||||||| :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

Db 1 LVLLAVALQSDAGPYGANVEDSICCQDYIRHPLPPRFVKEFYWTSCSKRPGVVLLITIK 60
 :|||||:| :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

QY 72 DKEICADPRVPVWVKMILNKL 92
 :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

Db 61 NRDICADPRMLWVKLLHLKLA 81
 :|||||:| :|||||:| :|||||:| :|||||:| :|||||:|

RESULT 4

Q98158 Q98158 PRELIMINARY; PRT; 95 AA.
 AC Q98158; O12569;
 DT 01-FEB-1997 (TREMBlrel. 02, Created)
 DT 01-JUL-1997 (TREMBlrel. 04, Last sequence update)
 DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)
 DE ORF K6.
 OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
 OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
 OC Gammaherpesvirinae; Rhadinovirus.
 OX NCBI_TaxID=37296;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-97094384; PubMed-8939871;
 RX Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
 RA "Molecular mimicry of human cytokine and cytokine response pathway
 RT genes by KSHV";
 RT Science 274:1739-1744(1996).
 RL Science 274:1739-1744(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-97121480; PubMed-8962146;
 RX Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
 RX Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
 RA "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
 RT (HHV8)";
 RT Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
 RX Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
 RA Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
 RN [4]
 RP SEQUENCE FROM N.A.
 RX Nicholas J., Ruvoilo V.R., Burns W.H., Sandford G., Wan X., Clufo D.,
 RX Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RX Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
 RX Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
 RA Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-97296220; PubMed-9151804;
 RX Neipel F., Albrecht J.C., Fleckenstein B.;
 RA "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
 RT human herpesvirus 8: determinants of its pathogenicity?";
 RT J. Virol. 71:4187-4192(1997).
 RN [7]
 RP SEQUENCE FROM N.A.
 RX Sun R., Lin S.-F., Miller G.;
 RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RP SEQUENCE FROM N.A.
 RX Ren S., Lin S.-F., Miller G.;
 RL Submitted (FEB-1996) to the EMBL/GenBank/DBJ databases.
 DR EMBL; U75698; AAC57095.1; -;
 DR EMBL; U74585; AAB61704.1; -;
 DR EMBL; U93872; AAB62671.1; -;

[illegible]

Oy 68 LTFRDKEICADPRVPWVKMILNKLQ 93
: | : | | : | | : | | : | | :
Db 65 VTVOGKSICSDPKDKRVKKAVRYLQ 90

Search completed: July 28, 2003, 04:02:51
Job time : 19.1933 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 17.916 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYCANM.....EICADPRVPWVKMLNKLQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_101002.*
1: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
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23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	441	100.0	86	19 AAW59432	Human chemokine pr
2	441	100.0	93	18 AAW20058	Macrophage derived
3	441	100.0	93	19 AAW62783	Amino acid sequenc
4	441	100.0	93	19 AAW59433	Human chemokine pr
5	441	100.0	93	19 AAW40811	Macrophage-derived
6	441	100.0	93	20 AAV26175	Macrophage-derived
7	441	100.0	93	20 AAV24414	Human macrophage d
8	441	100.0	93	20 AAY05871	Human macrophage-d
9	441	100.0	93	20 AAY06829	Macrophage derived
10	441	100.0	93	21 AAB07500	A human monokine d

11	441	100.0	93	23 AAO14046	Human macrophage-d
12	436	98.9	93	18 AAW07604	Cytokine beta-l3 s
13	436	98.9	93	19 AAW57881	Human chemokine be
14	436	98.9	93	22 AAB68352	Amino acid sequenc
15	432	98.0	93	20 AAY05879	Human macrophage-d
16	430	97.5	93	20 AAY05880	Macaque macrophage
17	397	90.0	93	18 AAW20059	Human macrophage d
18	397	90.0	93	20 AAY24417	Macrophage derived
19	397	90.0	93	20 AAY05872	Human macrophage-d
20	386	87.5	69	23 AAO20022	Human chemokine MD
21	386	87.5	69	23 AAO14155	Human MDC protein.
22	386	87.5	70	18 AAW20060	Human macrophage d
23	386	87.5	70	20 AAY24413	Macrophage derived
24	386	87.5	70	20 AAY05873	Human macrophage-d
25	386	87.5	154	20 AAY05878	Yeast pre-pro-alpha
26	386	87.5	172	20 AAY29895	Human MDC and huma
27	386	87.5	334	20 AAY29904	Human MDC and huma
28	386	87.5	587	20 AAY29900	Human MDC and HIV-
29	380	86.2	68	18 AAW17668	Stem cell mobilisi
30	374	84.8	69	18 AAW20061	Human macrophage d
31	374	84.8	69	20 AAY24415	Macrophage derived
32	374	84.8	69	20 AAY05874	Human macrophage-d
33	362	82.1	69	18 AAW20062	Human macrophage d
34	362	82.1	69	20 AAY24416	Macrophage derived
35	362	82.1	69	20 AAY05875	Human macrophage-d
36	312	70.7	473	22 AAB61797	Chimeric chemokine
37	310	70.3	92	19 AAW59434	Mouse chemokine pr
38	310	70.3	92	20 AAY05876	Mouse macrophage-d
39	309	70.1	81	20 AAY05877	Rat macrophage-der
40	268	60.8	68	22 AAB61808	Murine MDC mature
41	268	60.8	68	23 AAG78392	Mouse chemokine m
42	268	60.8	68	23 AAG68355	Murine chemokine m
43	214.5	48.6	67	23 AAG78396	Human/mouse hybrid
44	214.5	48.6	67	23 AAG68359	Chimeric chemokine
45	213	48.3	37	22 AAB39053	Peptide #6359 enco

ALIGNMENTS

RESULT 1

AAW59432

ID AAW59432 standard; Protein: 86 AA.

XX AC AAW59432;

XX DT 27-AUG-1998 (first entry)

XX DE Human chemokine protein 331D5 from CD1a+ cDNA library.

XX KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;

XX KW degenerative condition; abnormal proliferation; regeneration;

XX KW degeneration; atrophy.

XX OS Homo sapiens.

XX SS XX

XX FH Key Location/Qualifiers

XX FT Peptide

XX FT /label= signal

XX FT /note= "partial signal sequence"

XX FT 16..86

XX FT /label= chemokine protein 331D5

XX XX

XX PN WO9811226-A2.

XX XX

XX PD 19-MAR-1998.

XX XX

XX PF 09-SEP-1997; 97WO-US15315.

XX XX

XX PR 10-SEP-1996; 96US-0025724.

XX XX

XX PA (SCHE) SCHERING CORP.

XX XX

PI Gorman DM, Hedrick JA, Zlotnik A;
 XX WPI; 1998-207387/18.
 DR N-PSDB; AAV34996.
 XX
 PT Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions
 XX
 PS Disclosure; Page 75; 82pp; English.
 XX
 CC This sequence represents a novel human chemokine protein, 331D5 which has
 CC been isolated from a 90 per cent CD1a+ cDNA library and obtained by
 CC random sequencing. Nucleic acid sequences encoding the chemokines can be
 CC used for detection, in e.g. forensic techniques. Antibodies and other
 CC binding agents may be used in diagnostics. The chemokines themselves are
 CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
 CC proliferation, regeneration, degeneration or atrophy may be treated by
 CC the inventive compositions.
 XX
 SQ Sequence 86 AA;
 Query Match 100.0%; Score 441; DB 19; Length 86;
 Best Local Similarity 100.0%; Pred. No. 1.2e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LVLLAVALQATAGPYGANNMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRGVVLLTFR 60
 DB 5 LVLLAVALQATAGPYGANNMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRGVVLLTFR 64
 QY 61 DKEICADPRVPWVKMILNKLQ 82
 DB 65 DKEICADPRVPWVKMILNKLQ 86
 RESULT 2
 AAW20058
 ID AAW20058 standard; Protein; 93 AA.
 XX
 AC AAW20058;
 XX
 DT 11-SEP-1997 (first entry)
 DE Macrophage derived chemokine for treating inflammation.
 XX
 KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
 KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
 KW wound healing; angiogenesis; inflammation.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /label= sig_peptide
 FT Protein 25..93
 FT /label= mat_protein
 XX
 PN WO9640923-Al.
 XX
 PD 19-DEC-1996.
 XX
 PF 07-JUN-1996; 96WO-US10114.
 XX
 PR 16-NOV-1995; 95US-0558658.
 PR 07-JUN-1995; 95US-0479620.
 XX
 XX (ICOS-) ICOS CORP.
 PA
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the

PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 100.0%; Score 441; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LVLLAVALQATAGPYGANNMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRGVVLLTFR 60
 DB 12 LVLLAVALQATAGPYGANNMEDSVCCRDYRVYRLPLRVVKKHFYWTSDSCPRGVVLLTFR 71
 QY 61 DKEICADPRVPWVKMILNKLQ 82
 DB 72 DKEICADPRVPWVKMILNKLQ 93
 RESULT 3
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 XX
 AC AAW62783;
 XX
 DT 24-SEP-1998 (first entry)
 DE Amino acid sequence of human STCP-1.
 XX
 KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX
 OS Homo sapiens.
 XX
 PN WO9824907-Al.
 XX
 PD 11-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US21552.
 XX
 PR 03-DEC-1996; 96US-0760127.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Andrew DP, Chang M;
 XX
 DR WPI; 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX
 PT Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells
 XX
 PS Claim 1; Fig 2A-F; 96pp; English.
 XX
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other

CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.

XX STCP-1 DNA/RNA in mammalian samples.
 SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPFGVLLTFR 60
 DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPFGVLLTFR 71

QY 61 DKEICADPRVPVWKMLNKLQ 82
 DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 4

AAW59433
 ID AAW59433 standard; Protein; 93 AA.

XX AC AAW59433;
 XX DT 27-AUG-1998 (first entry)

XX DE Human chemokine protein 331D5.

XX KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /label= signal
 FT /label= 331D5
 FT /note= "chemokine protein"

XX WO9811226-A2.

XX PD 19-MAR-1998.

XX PF 09-SEP-1997; 97WO-US15315.

XX PR 10-SEP-1996; 96US-0025724.

XX PA (SCHE) SCHERING CORP.

XX PI Gorman DM, Hedrick JA, Zlotnik A;

XX WPI; 1998-207387/18.

XX DR N-PSDB; AAV34997.

XX Mammalian CC and CXK chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions

XX PS Claim 1; Page 78; 82pp; English.

XX This sequence represents a novel human chemokine protein, 331D5.

CC Nucleic acid sequences encoding the chemokines can be used for detection,
 CC in e.g. forensic techniques. Antibodies and other binding agents may be

CC used in diagnostics. The chemokines themselves are useful for treatment
 CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
 CC regeneration, degeneration or atrophy may be treated by the inventive
 CC compositions.

XX STCP-1 DNA/RNA in mammalian samples.
 SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPFGVLLTFR 60
 DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPFGVLLTFR 71

QY 61 DKEICADPRVPVWKMLNKLQ 82
 DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 5

AAW40811
 ID AAW40811 standard; Protein; 93 AA.

XX AC AAW40811;
 XX DT 01-APR-1998 (first entry)

XX DE Macrophage-derived chemokine.

XX KW Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
 KW arthritis; inflammatory disorder; cancer; Crohn's disease;
 KW atherosclerosis.
 XX OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "leader peptide"
 FT /note= "mature protein"

XX US5688927-A.

XX PD 18-NOV-1997.

XX PF 07-JUN-1995; 95US-0480449.

XX PR 07-JUN-1995; 95US-0480449.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX WPI; 1998-008038/01.

XX DR N-PSDB; AAT99233.

XX Antibodies specific for macrophage-derived chemokine - useful for
 PT purifying or detecting the chemokine or modulating its activity

XX Claim 3; Column 21-24; 22pp; English.

XX This sequence represents the macrophage-derived chemokine (MDC). This
 CC protein is used to produce the antibodies of the invention. The
 CC antibodies are useful for purifying MDC polypeptides, for detecting
 CC endogenous MDC in a host, and for modulating binding of MDC to its
 CC receptors. The DNA encoding this sequence can be used for identifying and
 CC isolating non-human MDC homologues. The MDC protein is potentially useful
 CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
 CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLTLFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLTLFR 71

Oy 61 DKEICADPRVPVWKMLNKLQ 82
 Db 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 6
 AAY26175
 ID AAY26175 standard; Protein; 93 AA.
 XX
 AC AAY26175;
 XX
 DT 29-SEP-1999 (first entry)
 XX
 DE Human macrophage derived chemokine.
 XX
 KW Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
 KW humoral response; cell-mediated response; PCR; immunostimulatory;
 KW expression plasmid vector.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /note= "signal peptide"
 FT Protein 25..93
 FT /note= "mature macrophage-derived chemokine"
 XX
 PN WO9929728-A1.
 XX
 PD 17-JUN-1999.
 XX
 PF 11-DEC-1998; 98WO-US26291.
 XX
 PR 11-DEC-1997; 97US-0069281.
 XX
 PA (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
 XX
 PI Devico AL, Gallo RC, Garzino-Demo A;
 XX
 DR WPI; 1999-385578/32.
 DR N-PSDB; AAX80630.
 XX
 FT Methods of enhancing vaccine efficacy
 PS Claim 6; Fig 1A(1)-1A(2); 134pp; English.
 XX
 CC The present sequence is macrophage-derived chemokine. This belongs to
 CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
 CC combining it with one or more chemokines to enhance the immune response
 CC to an antigen. This can be humoral or cell-mediated immune response. The
 CC purified chemokines, fragments, derivatives or analogues are
 CC administered either concurrently with one or more purified antigens
 CC against which an immune response is desired or within a time period
 CC either before or after antigen administration. The chemokine gene is
 CC isolated by PCR, and administered by constructing an expression plasmid
 CC vector which can be expressed in a coordinated manner upon introduction
 CC in a suitable cell. The vaccines are immunostimulatory and can be used
 CC to treat microbial diseases especially HIV.
 XX
 SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLTLFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLTLFR 71

Oy 61 DKEICADPRVPVWKMLNKLQ 82
 Db 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 7
 AAY24414
 ID AAY24414 standard; Protein; 93 AA.
 XX
 AC AAY24414;
 XX
 DT 24-SEP-1999 (first entry)
 XX
 DE Human macrophage derived chemokine.
 XX
 KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /label= signal
 FT Protein 25..93
 FT /label= MDC
 XX
 PN US5932703-A.
 XX
 PD 03-AUG-1999.
 XX
 PF 07-JUN-1996; 96US-0660542.
 XX
 PR 07-JUN-1996; 96US-0660542.
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Godiska R, Gray PW;
 XX
 DR WPI; 1999-443621/37.
 DR N-PSDB; AAX90162.
 XX
 FT Macrophage derived chemokine analogues useful for inhibiting
 FT macrophage derived chemokine-induced chemotaxis
 PS Claim 2; Column 41-43; 43pp; English.
 XX
 CC The present invention describes macrophage derived chemokine (MDC)
 CC analogues which are capable of inhibiting MDC induced chemotaxis.
 CC Therefore, the MDC analogues may be used to modulate inflammatory and
 CC immune responses allowing for the treatment of disorders associated
 CC with excessive inflammation or overactive immune responses. Inflammatory
 CC disorders which may be treated in this way include Crohn's disease
 CC (manifested by chronic inflammation of the bowel), atherosclerosis,
 CC arthritis and pulmonary fibrosis. The present sequence represents human
 CC MDC.
 XX
 SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLTLFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLTLFR 71

QY 61 DKEICADPRVPWVKMILNLSQ 82
 |||||
 Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 8

AAY05871
 ID AAY05871 standard; Protein; 93 AA.

XX AC AAY05871;

XX DT 02-AUG-1999 (first entry)

XX DE Human macrophage-derived C-C chemokine MDC.

XX DE MDC; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "signal peptide"
 FT /note= "mature protein"

XX PN W09915666-A2.

XX PD 01-APR-1999.

XX PE 28-SEP-1998; 98WO-US20270.

XX PR 28-APR-1998; 98US-0067447.

XX PR 26-SEP-1997; 97US-0939107.

XX PA (ICOS-) ICOS CORP.

XX PI Chantriy DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX DR WPI; 1999-254715/21.

XX DR N-PSDB; AAX58316.

XX PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists

XX PS Example 1; Page 124; 147pp; English.

XX CC The present sequence represents a novel human C-C chemokine,
 CC designated macrophage derived chemokine (MDC) that binds to the
 CC CCR4 chemokine receptor. The invention provides vertebrate MDC
 CC polypeptides (see also AAY05876, AAY05877 and AAY05880) and isolated
 CC polynucleotides encoding them, vectors and host cells, and methods
 CC for the recombinant or synthetic production of MDC. Also provided
 CC are MDC analogues, antibodies and antagonists. The MDC antagonists
 CC are used for the preparation of medicaments for the suppression of
 CC the proliferation of a mammalian immunodeficiency virus, for
 CC inhibiting platelet aggregation in a mammal, for the treatment or
 CC palliation of lupus erythematosus in a mammal, for inhibiting
 CC MDC-induced activation, chemotaxis or proliferation of cells that
 CC express CCR4, for inhibiting or palliating an allergic reaction in
 CC a mammal, and for treating asthma (all claimed). MDC polypeptides
 CC are also used in claimed vaccine compositions.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLRVKHFYWTSDCPRPGVLLTFR 60
 |||||

Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLRVKHFYWTSDCPRPGVLLTFR 71
 QY 61 DKEICADPRVPWVKMILNLSQ 82
 |||||
 Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 9

AAY06829

ID AAY06829 standard; Protein; 93 AA.

XX AC AAY06829;

XX DT 25-JUN-1999 (first entry)

XX DE Macrophage derived chemokine (MDC) encoding DNA.

XX DE Macrophage derived chemokine; MDC; lentivirus infection; human; HIV;
 KW human immunodeficiency virus; feline immunodeficiency virus;
 KW bovine immunodeficiency virus.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers
 FT Peptide 27..45
 FT /note= "N-terminal fragment specifically claimed
 FT for in claim 18"
 FT Peptide 26..45
 FT /note= "N-terminal fragment specifically claimed
 FT for in claim 19"

XX PN W09914237-A1.

XX PD 25-MAR-1999.

XX PE 16-SEP-1998; 98WO-US19450.

XX PR 16-SEP-1997; 97US-0931764.

XX PA (ALKU) AKZO NOBEL NV.

XX PI Devico AL, Gallo RC, Garzino-Demo A, Markham PD;

XX PI Pal R;

XX DR WPI; 1999-244024/20.

XX DR N-PSDB; AAX32817.

XX PT Treatment or prevention of lentivirus, particularly HIV infection

XX PS Claim 16; Page 97-98; 103pp; English.

XX CC This represents a human macrophage derived chemokine (MDC). The
 CC invention provides a novel method of treating or preventing lentivirus
 CC (LV) infection or replication in a human subject, that comprises
 CC administering to the subject a composition comprising MDC or a derivative
 CC of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The
 CC products can be used for treating or preventing LV infection or
 CC replication, particularly HIV infection or replication. The products can
 CC also be used for the prognosis for a LV infection, particularly an HIV
 CC infection using the MDC as a prognostic indicator. The methods can also
 CC be used with other LVs, e.g. simian immunodeficiency virus, feline
 CC immunodeficiency virus and bovine immunodeficiency virus.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLRVKHFYWTSDCPRPGVLLTFR 60
 |||||
 Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLRVKHFYWTSDCPRPGVLLTFR 71

Qy 61 DKEICADPRVPVWKMLNKLQSQ 82
 Db 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 10

AAB07500
 ID AAB07500 standard; Protein; 93 AA.

XX AC AAB07500;

XX DT 20-OCT-2000 (first entry)

XX DE A human monokine derived chemokine.

XX KW Systemic memory T cell; CCR4; TARC; integrin dependent arrest;
 KW thymus and activation-regulated chemokine; vascular receptor;
 KW MDC; monokine derived chemokine; adhesion trigger; inflammation.

XX OS Homo sapiens.

XX PN WO200041724-A1.

XX PD 20-JUL-2000.

XX PF 14-JAN-2000; 2000WO-US00953.

XX PR 15-JAN-1999; 99US-0232878.

XX PA (STRD) UNIV LELAND STANFORD JUNIOR.

XX PA (LEUK-) LEUKOSITE INC.

XX PI Butcher EC, Campbell JJ, Wu L, Rottman JB;

XX DR WPI: 2000-475957/41.

XX DR N-PSDB; AAA58874.

PT Modulating the trafficking of systemic memory T cells in mammals by
 PT administering a CCR4 modulating agent, useful for the treatment of
 PT inflammation

PS Disclosure; Page 38; 39pp; English.

CC The specification describes a method of modulating the trafficking of
 CC systemic memory T cells in a mammalian host. The method comprises
 CC administering a CCR4 modulating agent. It has been found that systemic
 CC T cells such as express high levels of CCR4. Ligands of CCR4 such as
 CC TARC (thymus and activation-regulated chemokine) and MDC (monokine
 CC derived chemokine) act as an adhesion trigger and, upon CCR4 binding,
 CC these cells undergo integrin dependent arrest to the appropriate
 CC vascular receptors. This arrest acts to localize the cells at the
 CC target site. The method modulates this triggering and CCR4 mediated
 CC chemotaxis to affect the localization of T cells in targeted tissues.
 CC The active agent may be a CCR4 agonist that acts to enhance T cell
 CC localization. Alternatively, it may be an antagonist that blocks CCR4
 CC biological activity. A CCR4 antagonist may be administered for the
 CC treatment of inflammation. The present sequence represents a human MDC.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 21; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFR 71

Qy 61 DKEICADPRVPVWKMLNKLQSQ 82

Db 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 11

AAO14046

XX ID AAO14046 standard; Protein; 93 AA.

XX AC AAO14046;

XX DT 08-MAY-2002 (first entry)

XX DE Human macrophage-derived C-C chemokine (MDC).

XX KW Human; macrophage-derived C-C chemokine; MDC; immune system;
 KW leukocyte; monocyte; calcium flux; chemotaxis; medical imaging;
 KW infection; inflammation; macrophage; Crohn's disease;
 KW rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;
 KW chemotherapy; radiation therapy; tumour.

XX OS Homo sapiens.

XX Key Location/Qualifiers

XX FH Peptide 1..24

XX FT /note= "Signal peptide"

XX FT Protein 25..93

XX FT /note= "Mature macrophage-derived C-C chemokine, this is
 a specifically claimed region"

XX FT Misc-difference 25..39

XX FT /note= "Specifically claimed region"

XX PN US6320023-B1.

XX PD 20-NOV-2001.

XX PF 07-JUN-1995; 95US-0479603.

XX PR 07-JUN-1995; 95US-0479603.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX DR WPI: 2002-074410/10.

XX DR N-PSDB; AAK98372.

PT Macrophage derived C-C chemokines useful in medical imaging and for the
 PT development of agents for controlling inflammation

PS Claim 1; Fig 1; 22pp; English.

CC The present sequence represents a novel human macrophage-derived C-C
 CC chemokine (MDC) of the invention. Chemokines comprise a family of small
 CC secreted proteins which attract and activate leukocytes, thereby aiding
 CC in the stimulation and regulation of the immune system. C-C cytokines are
 CC a subfamily known to activate monocytes, causing calcium flux and
 CC chemotaxis. The invention comprises a novel human MDC protein and nucleic
 CC acids, as well as methods for the production of the MDC protein. The MDC
 CC of the invention is useful in medical imaging (e.g. for imaging sites of
 CC infection, inflammation, and other sites having C-C chemokine receptor
 CC molecules. Inhibition of MDC is believed to be useful in treating
 CC diseases involving macrophages (e.g. Crohn's disease, rheumatoid
 CC arthritis or atherosclerosis). Alternatively, augmenting the effects of
 CC MDC is believed to be beneficial towards wound healing and angiogenesis.
 CC Also MDC or MDC agonists may be beneficial to patients receiving
 CC chemotherapy or radiation therapy and in the treatment of tumours.

XX SQ Sequence 93 AA;

Query Match 100.0%; Score 441; DB 23; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.4e-47;
 Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFR 60
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFR 71

Qy 61 DKEICADPRVPWVKMILNLSQ 82
 Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 12

AAW07604
 ID AAW07604 standard; Protein; 93 AA.

XX AC AAW07604;

XX DT 03-SEP-1997 (first entry)

XX DE Cytokine beta-13 stimulates migration/activation of immune cells.

XX KW Chemokine beta-13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
 KW defence; activation; eosinophil; monocyte; macrophage; T lymphocyte;
 KW T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection;
 KW Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis;
 KW leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
 KW rheumatoid arthritis; silicosis.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT Misc-difference 45

FT FT /note= "given as encoded by CAC codon in AAT44026"

PN W09639521-AL.

XX PD 12-DEC-1996.

XX PF 06-JUN-1995; 95WO-US07294.

XX PR 06-JUN-1995; 95WO-US07294.

XX PA (HUMA-) HUMAN GENOME SCI INC.

XX PA (SMIK) SMITHKLINE BEECHAM CORP.

XX PI Li H, Seibel G;

XX DR WPI; 1997-043143/04.

XX DR N-PSDB; AAT44026.

XX PT Human chemokine beta-13 - useful for treating solid tumours,
 PT leukaemia, infections, autoimmune disease, fibrotic disorders,
 PT psoriasis, etc.

XX PS Claim 10; Page 46; 58pp; English.

XX CC AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
 CC C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for
 CC treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13
 CC stimulates the invasion and activation of host defence cells making it
 CC useful for treating solid tumours, e.g. Kaposi's sarcoma, and for
 CC enhancing resistance to acute and chronic infections, e.g. mycobacterial
 CC infections. The chemokine induces chemotactic migration of monocytes,
 CC neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to
 CC sites where they are needed. Eosinophils may be attracted to the site
 CC of a parasitic infection to kill parasite larvae. Ck-beta-13 also
 CC recruits debris-clearing and connective tissue promoting inflammatory
 CC cells, and is therefore used to stimulate wound healing, prevent
 CC scarring and treat liver cirrhosis, osteoarthritis and pulmonary
 CC fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
 CC mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and
 CC to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
 CC chemokine which is useful for treating certain autoimmune diseases,
 CC atherosclerosis, chronic inflammatory and infective diseases, allergic
 CC reactions, rheumatoid arthritis, silicosis and bone marrow failure.

XX SQ Sequence 93 AA;

Query Match 98.9%; Score 436; DB 18; Length 93;

Best Local Similarity 98.8%; Pred. No. 5.8e-47;
 Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVKKHFYWTSDCPRPGVVLTFR 60
 Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVKKHFYWTSDCPRPGVVLTFR 71

Qy 61 DKEICADPRVPWVKMILNLSQ 82

Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 13

AAW57881

ID AAW57881 standard; Protein; 93 AA.

XX AC AAW57881;

XX DT 23-SEP-1998 (first entry)

XX DE Human chemokine beta-13.

XX KW Chemokine beta-13; human; Ckbeta-13; immune system-related disorder;
 KW tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis;
 KW autoimmune disease; bone marrow stem cell colony formation inhibitor;
 KW haematopoiesis regulator; therapy.

XX OS Homo sapiens.

XX PN W09824908-AL.

XX PD 11-JUN-1998.

XX PF 05-DEC-1997; 97WO-US23144.

XX PR 05-DEC-1996; 96US-0032432.

XX PA (HUMA-) HUMAN GENOME SCI INC.

XX PI Li H, Seibel G;

XX DR WPI; 1998-333327/29.

XX DR N-PSDB; AAV40786.

XX PT Human chemokine beta-13 polypeptide - useful in diagnosis and
 PT treatment of immune-system related disorders e.g. cancer of the
 PT immune system, leukaemias, autoimmune diseases etc.

XX PS Claim 18; Fig 1; 86pp; English.

XX CC This sequence is the human chemokine beta-13 (Ckbeta-13) of the
 CC invention. The polypeptide and nucleic acid are useful in diagnosis
 CC and treatment of immune system-related disorders in mammals (preferably
 CC humans). Such disorders include tumours, cancers, interstitial lung
 CC disease and dysregulation of immune cell function including leukaemias,
 CC lymphomas, autoimmune diseases etc. For example, certain tissues in
 CC mammals with cancer of the immune system express enhanced/decreased
 CC levels of Ckbeta-13 and mRNA encoding Ckbeta-13, and diagnosis can be
 CC achieved by assaying Ckbeta-13 gene expression and comparing to
 CC standard levels. The polypeptides can be administered therapeutically in
 CC pharmaceutical compositions e.g. to treat immune system-related disorders
 CC as above, treat sepsis, inhibit bone marrow stem cell colony formation
 CC during cancer therapy, regulate haematopoiesis, stimulate wound healing
 CC etc. Compositions comprising the polynucleotides may also be
 CC administered, especially to express Ckbeta-13 polypeptide in hosts to
 CC treat dysfunctions associated with aberrant endogenous Ckbeta-13.
 CC activity. The polynucleotides are also useful for mapping of
 CC chromosomes/chromosome sites. The polypeptides are useful to screen for
 CC agonists and antagonists of Ckbeta-13 activity. The antibodies are
 CC useful diagnostically or therapeutically e.g. as antagonists to treat
 CC subjects requiring Ckbeta-13 reduction.

XX SQ Sequence 93 AA;

Query Match 98.9%; Score 436; DB 19; Length 93;
 Best Local Similarity 98.8%; Pred. No. 5.8e-47;
 Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
 |||||
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
 |||||

QY 61 DKEICADPRVPWVKMILNLSQ 82
 |||||
 Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 14
 AAB68352
 ID AAB68352 standard; Protein; 93 AA.
 XX
 AC AAB68352;
 XX
 DT 09-JUL-2001 (first entry)
 XX
 DE Amino acid sequence of human chemokine beta-13 polypeptide.

XX Chemokine beta-13; CKbeta-13; Addison's disease; haemolytic anaemia;
 KW rheumatic arthritis; dermatitis; allergic encephalomyelitis;
 KW glomerulonephritis; Goodpasture's Syndrome; Grave's Disease;
 KW multiple sclerosis; allergic reaction; asthma; anaphylaxis;
 KW hypersensitivity; blood group incompatibility; organ rejection;
 KW graft vs host disease; inflammatory disorder; septic shock;
 KW infectious diseases; immune system relative disorder; leukemia;
 KW wound healing; inflammatory bowel disease; cancer; psoriasis;
 KW hypervascular disease; hyperproliferative disorder; atherosclerosis;
 KW bone marrow failure; inflammation.

XX Homo sapiens.
 OS
 PN WO200132128-A2.
 XX
 XX 10-MAY-2001.
 XX
 PF 02-NOV-2000; 2000WO-US30237.
 XX
 PR 03-NOV-1999; 99US-0432768.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA (BGHM) BRIGHAM & WOMEN'S HOSPITAL INC.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 XX
 PI Ullrich S, Seibel G, Li H, Lusinskas FW;
 XX
 DR WPI; 2001-316379/33.
 DR N-PSDB; AAF85169.
 XX
 PT Novel human chemokine beta-13 polypeptides useful for treating
 PT autoimmune diseases, inflammatory diseases, infectious diseases,
 PT allergic conditions, hypervascular diseases, tumors and for wound
 PT healing.

XX Claim 18; Fig 1; 220pp; English.
 PS
 CC The present sequence represents a human chemokine beta-13 (CKbeta-13).
 CC CKbeta-13 polypeptides and polynucleotides are useful for treating
 CC deficiencies or disorders of immune systems, haematopoietic cells,
 CC autoimmune disorders such as Addison's disease, haemolytic anaemia,
 CC rheumatic arthritis, dermatitis, allergic encephalomyelitis,
 CC glomerulonephritis, Goodpasture's Syndrome, Grave's Disease and multiple
 CC sclerosis, allergic reactions such as asthma, anaphylaxis,
 CC hypersensitivity, blood group incompatibility, organ rejection, graft
 CC vs host disease, inflammatory disorders including septic shock, sepsis
 CC or systemic inflammatory response syndrome, infectious diseases, immune
 CC system relative disorders including leukemia, wound healing, acute and
 CC chronic infection and inflammatory bowel disease, cancers, psoriasis,

CC hypervascular diseases, hyperproliferative disorders, atherosclerosis
 CC and bone marrow failure. They are also useful for modulating haemostatic
 CC or thrombolytic activity, for diagnosing infectious agents, modulate
 CC inflammation, inhibit bone marrow stem cells, colony formation, inhibit
 CC proliferation and differentiation of haematopoietic cells, inhibit
 CC epidermal keratinocyte proliferation, as anti-neovascularisation agent,
 CC enhance host defences, inhibit T-cell proliferation, prevent scarring
 CC during wound healing, increasing eosinophils, mobilize bone marrow stem
 CC cells, inhibit cell growth and inhibit chemotaxis and activation of
 CC macrophages.
 XX
 SQ Sequence 93 AA;

Query Match 98.9%; Score 436; DB 22; Length 93;
 Best Local Similarity 98.8%; Pred. No. 5.8e-47;
 Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
 |||||
 Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
 |||||

QY 61 DKEICADPRVPWVKMILNLSQ 82
 |||||
 Db 72 DKEICADPRVPWVKMILNLSQ 93

RESULT 15
 AAY05879
 ID AAY05879 standard; Protein; 93 AA.
 XX
 AC AAY05879;
 XX
 DT 02-AUG-1999 (first entry)
 XX
 DE Human macrophage-derived C-C chemokine MDC analogue.

XX MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 26 /note= "not Pro"
 FT

XX WO9915666-A2.
 XX
 PD 01-APR-1999.
 XX
 PF 28-SEP-1998; 98WO-US20270.
 XX
 PR 28-APR-1998; 98US-0067447.
 PR 26-SEP-1997; 97US-0939107.
 XX
 PA (ICOS-) ICOS CORP.

XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 PI WPI; 1999-254715/21.
 DR
 XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists
 PT Disclosure; Page 144; 147pp; English.

XX The present sequence represents a synthetic analogue of the novel
 CC human macrophage derived C-C chemokine MDC (see also AAY05871). The
 CC analogue has an amino acid substitution at residue 2 of the mature
 CC polypeptide. MDC analogues (see also AAY05872-75) are expected to be
 CC antagonists of MDC, inhibiting activity by competitively binding to

CC the receptor that recognises MDC or forming inactive heterodimers
CC with MDC. MDC antagonists are used in claimed methods for the
CC preparation of medicaments for the suppression of the proliferation
CC of a mammalian immunodeficiency virus, for inhibiting platelet
CC aggregation in a mammal, for the treatment or palliation of lupus
CC erythematosus in a mammal, for inhibiting MDC-induced activation,
CC chemotaxis or proliferation of cells that express CCR4, for
CC inhibiting or palliating an allergic reaction in a mammal, and for
CC treating asthma.
XX
SQ Sequence 93 AA;
Query Match 98.0%; Score 432; DB 20; Length 93;
Best Local Similarity 98.8%; Pred. No. 1.8e-46;
Matches 81; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVVKHFFYWTSDSCPRPGVLLTFR 60
Db ||||||||||| ||||||||||| ||||||||||| ||||||||||| |||||||||||
12 LVLLAVALQATEAGXYGANNEDSVCCRDYVYRLPLRVVKHFFYWTSDSCPRPGVLLTFR 71
QY 61 DKEICADPRVPVVKMIILKLSQ 82
Db ||||||||||| ||||||||||| ||||||||||| ||||||||||| |||||||||||
72 DKEICADPRVPVVKMIILKLSQ 93

Search completed: July 28, 2003, 04:04:46
Job time : 18.916 secs


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Db 72 DKEICADPRVPWVKMILNLSQ 93
|||||
RESULT 2
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-660-542-2
Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-50;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 71
|||||
Qy 61 DKEICADPRVPWVKMILNLSQ 82
|||||
Db 72 DKEICADPRVPWVKMILNLSQ 93
|||||
RESULT 4
US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-603-2
Query Match 100.0%; Score 441; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-50;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLLTFR 71
|||||
Qy 61 DKEICADPRVPWVKMILNLSQ 82
|||||
Db 72 DKEICADPRVPWVKMILNLSQ 93
|||||
RESULT 3
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
```


Db 12 LVLVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFR 71
QY 61 DKEICADPRVPVVKMILNLSQ 82
Db 72 DKEICADPRVPVVKMILNLSQ 93

RESULT 5

PCT-US95-07294-2
Sequence 2, Application PC/TUS9507294
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07294
FILING DATE: June 6, 1995

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/464,594
FILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-356
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
PCT-US95-07294-2

Query Match 100.0%; Score 441; DB 5; Length 93;

Best Local Similarity 100.0%; Pred No. 8,1e-50;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFR 60
|||||

Db 12 LVLVALQATAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFR 71
|||||

QY 61 DKEICADPRVPVVKMILNLSQ 82
|||||

Db 72 DKEICADPRVPVVKMILNLSQ 93
|||||

RESULT 6

US-08-660-542-25
Sequence 25, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker, Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
FILING DATE: 25-3856
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Protein
LOCATION: 1..69
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
OTHER INFORMATION: /note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
OTHER INFORMATION: /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
OTHER INFORMATION: /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
OTHER INFORMATION: /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
FEATURE:
NAME/KEY: misc_feature

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; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-08-660-542-25
Query Match 90.0%; Score 397; DB 2; Length 93;
Best Local Similarity 92.7%; Pred. No. 4e-44; Indels 0; Gaps 0;
Matches 76; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
Qy 61 DKEICADPRVPWVKMILNLSQ 82
Db 72 DKXICADPRVPXKXKMLNLSQ 93
RESULT 7
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
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; MOLECULE TYPE: peptide
; US-08-660-542-30
Query Match 87.5%; Score 386; DB 2; Length 70;
Best Local Similarity 100.0%; Pred. No. 7.5e-43; Indels 0; Gaps 0;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 14 GPYANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 73
Db 2 GPYANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
Qy 74 KMILNLSQ 82
Db 62 KMILNLSQ 70
RESULT 8
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31
Query Match 84.8%; Score 374; DB 2; Length 69;
Best Local Similarity 97.1%; Pred. No. 2.6e-41;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 14 GPYANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 73
Db 1 GPYANNMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVP 60
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Qy 74 KMILNKLSQ 82
| | | | | | | |
Db 61 KMILNKLSQ 69

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Qy 74 KMILNKSQ 82
Db 61 KMILNKSQ 69

RESULT 10
US-09-230-637-26
; Sequence 26, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary

```

; APPLICANT: Nicholas, John
; APPLICANT: Hardwick, J. Marie
; APPLICANT: Reitz, Marvin
; TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
; TITLE OF INVENTION: Associated Herpesvirus
; FILE REFERENCE: 1107-78372
; CURRENT APPLICATION NUMBER: US/09/230,637
; CURRENT FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 60/022,591
; PRIOR FILING DATE: 1996-07-25
; PRIOR APPLICATION NUMBER: PCT US 97/12931
; PRIOR FILING DATE: 1997-07-24
; NUMBER OF SEQ ID NOS: 62
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 26
; LENGTH: 95
; TYPE: PRT
; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
; US-09-230-637-26

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Qy 61 DKEICADPRVPVKMILNKL 80
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Db 72 GRQICADPSKNWVRQLMQRL 91

RESULT 11
 US-08-208-339A-4
 Sequence 4, Application US/08208339A
 Patent No. 5504003
 GENERAL INFORMATION:
 APPLICANT: LI, ET AL.
 TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4
 NUMBER OF SEQUENCES: 4
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
 ADDRESSEE: CECCHI, STEWART & OLSTEIN
 STREET: 6 BECKER FARM ROAD
 CITY: ROSELAND
 STATE: NEW JERSEY
 COUNTRY: USA
 ZIP: 07068
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 INCH DISKETTE
 COMPUTER: IBM PS/2
 OPERATING SYSTEM: MS-DOS
 SOFTWARE: WORD PERFECT 5.1
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/208,339A
 FILING DATE: 8 MARCH 1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: FERRARO, GREGORY D.
 REGISTRATION NUMBER: 36,134
 REFERENCE/DOCKET NUMBER: 325800-77
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 201-994-1700
 TELEFAX: 201-994-1744
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 89 AMINO ACIDS
 TYPE: AMINO ACID
 STRANDEDNESS:

TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
US-08-208-339A-4

Query Match 34.2%; Score 151; DB 1; Length 89;
Best Local Similarity 35.0%; Pred. No. 2.7e-12;
Matches 28; Conservative 17; Mismatches 33; Indels 2; Gaps 1;
QY 1 LVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFWYVTSDCPRPGVLLTFR 60
DB 8 LVLVCTMALCSAQVGTNKE--LCCLVYTSWLPORFIVDYSETSPQCPRPGVLLTFR 65
QY 61 DKEICADPRVPWVKMILNKL 80
DB 66 GROICADPNKKWQKYISDL 85

RESULT 12

US-08-722-719-6
Sequence 6, Application US/08722719
Patent No. 6001606
GENERAL INFORMATION:
APPLICANT: ROSEN, CRAIG A.
APPLICANT: RUBIN, STEVEN M.
APPLICANT: LI, HAODONG
APPLICANT: ADAMS, MARK D.
TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/722,719
FILING DATE: 30-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,339
FILING DATE: 08-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/446,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,682
FILING DATE: 06-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/468,775
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0330007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 89 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-722-719-6

Query Match 34.2%; Score 151; DB 3; Length 89;
Best Local Similarity 35.0%; Pred. No. 2.7e-12;
Matches 28; Conservative 17; Mismatches 33; Indels 2; Gaps 1;
QY 1 LVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFWYVTSDCPRPGVLLTFR 60
DB 8 LVLVCTMALCSAQVGTNKE--LCCLVYTSWLPORFIVDYSETSPQCPRPGVLLTFR 65
QY 61 DKEICADPRVPWVKMILNKL 80
DB 66 GROICADPNKKWQKYISDL 85

RESULT 13

US-09-334-951-6
Sequence 6, Application US/09334951
Patent No. 6451562
GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
FILE REFERENCE: Polynucleotides and Polypeptides (As Amended)
CURRENT APPLICATION NUMBER: US/09/334,951
CURRENT FILING DATE: 1999-06-17
EARLIER APPLICATION NUMBER: US 08/208,339
EARLIER FILING DATE: 1994-03-08
EARLIER APPLICATION NUMBER: US 08/446,881
EARLIER FILING DATE: 1995-05-05
EARLIER APPLICATION NUMBER: US 08/465,682
EARLIER FILING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: US 08/468,775
EARLIER FILING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: US 08/722,719
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 89
TYPE: PRT
ORGANISM: Homo sapiens
US-09-334-951-6

Query Match 33.8%; Score 149; DB 4; Length 89;
Best Local Similarity 35.0%; Pred. No. 4.9e-12;
Matches 28; Conservative 17; Mismatches 33; Indels 2; Gaps 1;

QY 1 LVLVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFWYVTSDCPRPGVLLTFR 60
DB 8 LVLVCTMALCSAQVGTNKE--LCCLVYTSWLPORFIVDYSETSPQCPRPGVLLTFR 65
QY 61 DKEICADPRVPWVKMILNKL 80
DB 66 GROICADPNKKWQKYISDL 85

RESULT 14

US-09-230-637-40
Sequence 40, Application US/09230637
Patent No. 6264958
GENERAL INFORMATION:
APPLICANT: Hayward, Gary
APPLICANT: Nicholas, John
APPLICANT: Hardwick, J. Marie
APPLICANT: Reitz, Marvin
TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
TITLE OF INVENTION: Associated Herpesvirus
FILE REFERENCE: 1107.78372
CURRENT APPLICATION NUMBER: US/09/230,637

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 11.1975 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93
 Perfect score: 441
 Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPVYVKMILNKLSO 82

Scoring table: BLOSUM62

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Searched: 451899 seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 4518999

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	441	100.0	93	11	US-09-811-088-2		Sequence 2, Appli
3	441	100.0	93	15	US-10-314-410-2		Sequence 2, Appli
4	436	98.9	93	10	US-09-908-599-2		Sequence 2, Appli
5	436	98.9	93	10	US-09-908-600-2		Sequence 2, Appli
6	268	60.8	68	15	US-10-001-221A-3		Sequence 3, Appli
7	214.5	48.6	67	15	US-10-001-221A-7		Sequence 7, Appli
8	213	48.3	37	10	US-09-864-761-43730		Sequence 43730, A
9	153	34.7	71	10	US-09-144-838-3		Sequence 3, Appli
10	152	34.5	78	15	US-10-001-221A-6		Sequence 6, Appli
11	151	34.2	89	10	US-09-334-9238-6		Sequence 6, Appli
12	151	34.2	89	10	US-09-334-954A-6		Sequence 6, Appli
13	151	34.2	97	10	US-09-925-502-792		Sequence 792, App
14	147.5	33.4	91	8	US-08-927-939-21		Sequence 21, Appli
15	147.5	33.4	91	10	US-09-144-838-9		Sequence 9, Appli
16	147.5	33.4	91	10	US-09-834-795A-29		Sequence 29, Appli

ALIGNMENTS

RESULT 1

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US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; FILE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

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Best Local Similarity 100.0%; Pred. No. 2.4e-46;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db	12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVLLTFR 71

RESULT 2

US-09-811-088-2

; Sequence 2, Application US/09811088
; Patent No. US2002016046A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US/09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US/08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US/09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US/08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US/08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

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Best Local Similarity 100.0%; Pred. No. 2.4e-46;
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QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPVWKMLNKLQSQ 82
DB 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US/09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US/08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US/09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US/08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/08/843,651
; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US/09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US/08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match 100.0%; Score 441; DB 15; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.4e-46;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPVWKMLNKLQSQ 82
DB 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PF177P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match 98.9%; Score 436; DB 10; Length 93;
Best Local Similarity 98.8%; Pred. No. 9.6e-46;
Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPVWKMLNKLQSQ 82
DB 72 DKEICADPRVPVWKMLNKLQSQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,


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STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2

Query Match 98.9%; Score 436; DB 10; Length 93;
Best Local Similarity 98.8%; Pred. No. 9.6e-46;
Matches 81; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFR 60
DB 12 LVLLAVALQATAGPYGANMEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFR 71

QY 61 DREICADPRVPVVKMLNKLQS 82
DB 72 DREICADPRVPVVKMLNKLQS 93

RESULT 6
US-10-001-221A-3
; Sequence 3, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 68
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 60.8%; Score 268; DB 15; Length 68;
Best Local Similarity 64.7%; Pred. No. 2.1e-25;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;

QY 14 GPGANVEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPVW 73
DB 1 GPGANVEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPVW 60
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QY 74 KMILNKLS 81
DB 61 KXLLHKLS 68

RESULT 7
US-10-001-221A-7
; Sequence 7, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; CURRENT FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: 09/834,814
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 67
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7

Query Match 48.6%; Score 214.5; DB 15; Length 67;
Best Local Similarity 58.5%; Pred. No. 6.8e-19;
Matches 38; Conservative 13; Mismatches 9; Indels 5; Gaps 1;

QY 22 DSV-----CCRDYRVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPVVKMI 76
DB 3 DSVSIPITCCQDIIRHPLSRVKEFFWTSKCRKPGVLLTVKNRDICADPRQVWVKKL 62

QY 77 LNKLS 81
DB 63 LHKLS 67

RESULT 8
US-09-864-761-43730
; Sequence 43730, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
; FILE REFERENCE: Aecomica-x-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 94.0588 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93
Perfect score: 441
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_Main.*

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- 5: /cgn2_6/ptodata/1/paa/us081_comb.pep.*
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- 26: /cgn2_6/ptodata/1/paa/us102_comb.pep.*
- 27: /cgn2_6/ptodata/1/paa/us60_comb.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	441	100.0	86	13	US-08-925-857-10
2	441	100.0	93	1	PCT-US00-00953-6
3	441	100.0	93	8	US-08-464-594-2
4	441	100.0	93	8	US-08-479-620-2
5	441	100.0	93	9	US-08-558-658-2
6	441	100.0	93	11	US-08-760-127-3
					Sequence 10, Appl
					Sequence 6, Appl
					Sequence 2, Appl
					Sequence 2, Appl
					Sequence 3, Appl

7	441	100.0	93	12	US-08-820-364-2	Sequence 2, Appl
8	441	100.0	93	13	US-08-925-857-12	Sequence 12, Appl
9	441	100.0	93	13	US-08-931-764-2	Sequence 2, Appl
10	441	100.0	93	13	US-08-931-764B-2	Sequence 2, Appl
11	441	100.0	93	13	US-08-939-107-2	Sequence 2, Appl
12	441	100.0	93	14	US-09-067-447-2	Sequence 2, Appl
13	441	100.0	93	14	US-09-067-447B-2	Sequence 2, Appl
14	441	100.0	93	14	US-09-067-447B-2	Sequence 2, Appl
15	441	100.0	93	19	US-09-509-165A-2	Sequence 2, Appl
16	441	100.0	93	19	US-09-591-992-2	Sequence 2, Appl
17	441	100.0	93	21	US-09-712-726-2	Sequence 2, Appl
18	441	100.0	93	21	US-09-791-537-22726	Sequence 22726, A
19	441	100.0	93	22	US-09-811-088-2	Sequence 2, Appl
20	441	100.0	93	22	US-09-837-446-6	Sequence 6, Appl
21	441	100.0	100	21	US-09-760-476-2007	Sequence 2007, Ap
22	441	100.0	100	21	US-09-760-481-204	Sequence 204, App
23	441	100.0	100	26	US-10-216-245-2007	Sequence 2007, Ap
24	441	100.0	100	26	US-10-216-388-204	Sequence 204, App
25	441	100.0	100	26	US-10-217-651-449	Sequence 449, App
26	436	98.9	93	1	PCT-US00-30237-2	Sequence 2, Appl
27	436	98.9	93	13	US-08-986-188-2	Sequence 2, Appl
28	436	98.9	93	18	US-09-432-768-2	Sequence 2, Appl
29	436	98.9	93	18	US-09-484-221-2	Sequence 2, Appl
30	436	98.9	93	23	US-09-908-599-2	Sequence 2, Appl
31	436	98.9	93	25	US-10-137-438-2	Sequence 2, Appl
32	436	98.9	93	27	US-60-032-432-2	Sequence 2, Appl
33	436	98.9	93	14	US-09-067-447-41	Sequence 41, Appl
34	432	98.0	93	14	US-09-067-447-41	Sequence 41, Appl
35	432	98.0	93	19	US-09-509-165A-41	Sequence 41, Appl
36	432	98.0	93	19	US-09-509-165A-46	Sequence 46, Appl
37	430	97.5	93	9	US-08-558-658-25	Sequence 25, Appl
38	397	90.0	93	13	US-08-939-107-25	Sequence 25, Appl
39	397	90.0	93	14	US-09-067-447-25	Sequence 25, Appl
40	397	90.0	93	14	US-09-067-447-25	Sequence 25, Appl
41	397	90.0	93	14	US-09-067-447-25	Sequence 25, Appl
42	397	90.0	93	14	US-09-067-447B-25	Sequence 25, Appl
43	397	90.0	93	19	US-09-509-165A-25	Sequence 25, Appl
44	386	87.5	69	27	US-60-412-866-1	Sequence 1, Appl
45	386	87.5	70	13	US-08-939-107-30	Sequence 30, Appl

ALIGNMENTS

RESULT 1
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESS: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/925,857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
; ATTORNEY/AGENT INFORMATION:

```
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0614K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-852-9196
; TELEFAX: 650-496-1200
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 86 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-925-857-10

Query Match 100.0%; Score 441; DB 13; Length 86;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
Db 5 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 64
Qy 61 DKEICADPRVPWVKMILKLSQ 82
Db 65 DKEICADPRVPWVKMILKLSQ 86

RESULT 2
PCT-US00-00953-6
; Sequence 6, Application PC/TUS00000953
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: PCT/US00/00953
; CURRENT FILING DATE: 2000-01-14
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US00-00953-6

Query Match 100.0%; Score 441; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
Qy 61 DKEICADPRVPWVKMILKLSQ 82
Db 72 DKEICADPRVPWVKMILKLSQ 93

RESULT 3
US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND

Query Match 100.0%; Score 441; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
Qy 61 DKEICADPRVPWVKMILKLSQ 82
Db 72 DKEICADPRVPWVKMILKLSQ 93

RESULT 4
US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA: US/08/479,620
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32628
; TELECOMMUNICATION INFORMATION:
```

TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-620-2

Query Match 100.0%; Score 441; DB 8; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
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DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNKLQ 82
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DB 72 DREICADPRVPVWKMLNKLQ 93
|||||

RESULT 5
US-08-558-658-2
; Sequence 2, Application US/08558658
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/558,658
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33009
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-558-658-2

Query Match 100.0%; Score 441; DB 9; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNKLQ 82
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DB 72 DREICADPRVPVWKMLNKLQ 93
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RESULT 6
US-08-760-127-3
; Sequence 3, Application US/08760127
; GENERAL INFORMATION:
; APPLICANT: Chang, Ming-shi
; APPLICANT: Andrew, David P.
; TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Amgen Inc.
; STREET: 1840 De Havilland Drive
; CITY: Thousand Oaks
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 91320
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/760,127
; FILING DATE: 03-DEC-1996
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Whiteford, Wendy A.
; REGISTRATION NUMBER: 36,964
; REFERENCE/DOCKET NUMBER: A-429
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (805) 447-1008
; TELEFAX: (805) 447-1090
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-760-127-3

Query Match 100.0%; Score 441; DB 11; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
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DB 12 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
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QY 61 DREICADPRVPVWKMLNKLQ 82
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DB 72 DREICADPRVPVWKMLNKLQ 93
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RESULT 7
US-08-820-364-2
; Sequence 2, Application US/08820364
; GENERAL INFORMATION:
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA

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; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; FILING DATE: 12-MAR-1997
; APPLICATION NUMBER: US/08/820.364
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L.
; REGISTRATION NUMBER: 35,283
; REFERENCE/DOCKET NUMBER: 07334/023001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-820-364-2

Query Match 100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71

QY 61 DKEICADPRVPVWKMLNKLQ 82
DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 8
US-08-857-12
; Sequence 12, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925.857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025.724
; FILING DATE: 10-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090

Query Match 100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; FILING DATE: 12-MAR-1997
; APPLICATION NUMBER: US/08/820.364
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L.
; REGISTRATION NUMBER: 35,283
; REFERENCE/DOCKET NUMBER: 07334/023001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-820-364-2

Query Match 100.0%; Score 441; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71

QY 61 DKEICADPRVPVWKMLNKLQ 82
DB 72 DKEICADPRVPVWKMLNKLQ 93

RESULT 9
US-08-931-764-2
; Sequence 2, Application US/08931764
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC)
; TITLE OF INVENTION: AS AN ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036/2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/931.764
; FILING DATE: To be assigned
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Mistrock, S. Leslie
; REGISTRATION NUMBER: 18,872
; REFERENCE/DOCKET NUMBER: 8769-029
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-790-9090
; TELEFAX: 212-869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-931-764-2

Query Match 100.0%; Score 441; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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; PRIOR APPLICATION DATA:

; PRIOR APPLICATION DATA:

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FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
;

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; CLASSIFICATION:
; .
; PRIOR APPLICATION DATA:
; ;

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;
FILING DATE: 07-JUN-1995
;
ATTORNEY/AGENT INFORMATION:
;

NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY:
LOCATION:
OTHER INFORMATION: /note = "human MDC"
US-09-067-447-2
Query Match 100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWKMLNKLQ 82
DB 72 DKEICADPRVPWKMLNKLQ 93

RESULT 13
US-09-067-447-2
Sequence 2, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: 08/939,107
EARLIER FILING DATE: 1997-09-26
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER FILING DATE: 1996-06-07
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER FILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/479,620
EARLIER FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 2
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens - human MDC
US-09-067-447-2
Query Match 100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWKMLNKLQ 82
DB 72 DKEICADPRVPWKMLNKLQ 93

RESULT 14
US-09-067-447B-2
Sequence 2, Application US/09067447B
GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
APPLICANT: Chantry, David H.
APPLICANT: Deeley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MD
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447B
FILING DATE:

CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY:
LOCATION:
OTHER INFORMATION: /note = "human MDC"
US-09-067-447B-2

Query Match 100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWKMLNKLQ 82
DB 72 DKEICADPRVPWKMLNKLQ 93

RESULT 15

US-09-509-165A-2
; Sequence 2, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; FILE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-509-165A-2

Query Match 100.0%; Score 441; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 2; le-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVKHFYWTSDCPRPGVLLTER 60
Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVYRLPLRVKHFYWTSDCPRPGVLLTER 71
Qy 61 DKEICADPRVPWVKMILNKLQ 82
Db 72 DKEICADPRVPWVKMILNKLQ 93

Search completed: July 28, 2003, 04:14:53
Job time : 94.0588 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 28.9412 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93
Perfect score: 441
Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPVWKMLNLSQ 82

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues
Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New.*
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2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4.*
3: /cgn2_6/ptodata/2/paa/US05_NEW_COMB.pep.*
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7: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep.*
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14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	441	100.0	93	2	PCT-US02-35606-146
3	441	100.0	93	2	PCT-US02-40891-473
4	441	100.0	93	2	PCT-US02-40891-549
5	441	100.0	93	2	PCT-US02-40891-638
6	441	100.0	93	2	PCT-US02-40891-639
7	441	100.0	93	2	PCT-US02-40891-640
8	441	100.0	93	2	PCT-US02-40891-641
9	441	100.0	93	12	US-10-314-410-2
10	441	100.0	93	12	US-10-405-027-5105
11	441	100.0	93	12	US-10-445-790-2
12	441	100.0	93	14	US-60-453-135-8659
13	441	100.0	93	14	US-60-453-050-8659
14	441	100.0	93	14	US-60-455-444-4765
15	441	100.0	93	14	US-60-465-241-4765
16	441	100.0	93	14	US-60-466-412-8659
17	436	98.9	93	12	US-10-285-572-2
18	436	98.9	93	12	US-10-137-438A-2
19	436	98.9	93	12	US-10-406-494-2

20	386	87.5	69	12	US-10-341-931-2	Sequence 2, Appli
21	386	87.5	172	12	US-10-335-394-49	Sequence 49, Appl
22	386	87.5	334	12	US-10-335-394-53	Sequence 53, Appl
23	386	87.5	587	12	US-10-335-394-50	Sequence 50, Appl
24	386	87.5	678	2	PCT-US02-40891-333	Sequence 333, App
25	380	86.2	677	2	PCT-US02-40891-422	Sequence 422, App
26	380	86.2	678	2	PCT-US02-40891-257	Sequence 257, App
27	373	84.6	676	2	PCT-US02-40891-424	Sequence 424, App
28	373	84.6	677	2	PCT-US02-40891-423	Sequence 423, App
29	366	83.0	676	2	PCT-US02-40891-425	Sequence 425, App
30	268	60.8	68	10	US-09-839-445-3	Sequence 3, Appli
31	268	60.8	68	12	US-10-001-221A-3	Sequence 3, Appli
32	214.5	48.6	67	10	US-09-839-445-7	Sequence 7, Appli
33	214.5	48.6	67	10	US-10-001-221A-7	Sequence 7, Appli
34	162.5	36.8	77	10	US-09-839-445-6	Sequence 6, Appli
35	153	34.7	691	2	PCT-US02-40891-345	Sequence 345, App
36	153	34.7	698	2	PCT-US02-40891-330	Sequence 330, Appl
37	152	34.5	78	12	US-10-001-221A-6	Sequence 6, Appli
38	151	34.2	89	2	PCT-US02-40891-546	Sequence 546, App
39	151	34.2	89	2	PCT-US02-40891-561	Sequence 561, App
40	151	34.2	89	2	PCT-US02-40891-562	Sequence 562, App
41	151	34.2	89	2	PCT-US02-40891-564	Sequence 564, App
42	151	34.2	89	2	PCT-US02-40891-565	Sequence 565, App
43	151	34.2	89	2	PCT-US02-40891-566	Sequence 566, App
44	151	34.2	89	2	PCT-US02-40891-567	Sequence 567, App
45	151	34.2	89	12	US-10-165-233A-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVKHFYWTSDSCPRPGVLLTFR 60
Db 12 LVLLAVALQATEAGPYGANNEDSVCCRDYVRLPLRVKHFYWTSDSCPRPGVLLTFR 71
QY 61 DKEICADPRVPVWKMLNLSQ 82
Db 72 DKEICADPRVPVWKMLNLSQ 93

RESULT 2
PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046

; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 146
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
|||||

Qy 61 DKEICADPRVPVWVKMLNKLQ 82
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Db 72 DKEICADPRVPVWVKMLNKLQ 93
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RESULT 3
PCT-US02-40891-473
; Sequence 473, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
|||||

Qy 61 DKEICADPRVPVWVKMLNKLQ 82
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Db 72 DKEICADPRVPVWVKMLNKLQ 93
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RESULT 4
PCT-US02-40891-549
; Sequence 549, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-549

Query Match 100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
|||||
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
|||||

Qy 61 DKEICADPRVPVWVKMLNKLQ 82
|||||
Db 72 DKEICADPRVPVWVKMLNKLQ 93
|||||

RESULT 5
PCT-US02-40891-638
; Sequence 638, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611

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Db      12 LVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71
QY      61 DKEICADPRVPVWKMIILNKLQ 82
          |||||
Db      72 DKEICADPRVPVWKMIILNKLQ 93

RESULT 7
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match      100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 60
          |||||
Db      12 LVLLAVALQTEAGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFR 71

QY      61 DKEICADPRVPVWKMIILNKLQ 82
          |||||
Db      72 DKEICADPRVPVWKMIILNKLQ 93

RESULT 8
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10

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; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match      100.0%; Score 441; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFR 60
   |||||||
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFR 71
   |||||||

QY 61 DKEICADPRVPWVKMILNKLQ 82
   |||||||
DB 72 DKEICADPRVPWVKMILNKLQ 93
   |||||||

RESULT 9
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearling, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2
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Query Match      100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFR 60
   |||||||
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFR 71
   |||||||

QY 61 DKEICADPRVPWVKMILNKLQ 82
   |||||||
DB 72 DKEICADPRVPWVKMILNKLQ 93
   |||||||

RESULT 10
US-10-405-027-5105
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match      100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFR 60
   |||||||
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVVLLTFR 71
   |||||||

QY 61 DKEICADPRVPWVKMILNKLQ 82
   |||||||
DB 72 DKEICADPRVPWVKMILNKLQ 93
   |||||||

RESULT 11
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: Garzino, Anthony L.
; APPLICANT: Devico, Anthony L.
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2
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Query Match      100.0%; Score 441; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
    |
RESULT 12
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
;
US-60-453-135-8659

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
    |
RESULT 13
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
;
US-60-453-050-8659

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
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RESULT 14
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
;
US-60-455-444-4765

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
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RESULT 15
US-60-465-241-4765
; Sequence 4765, Application US/60465241
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001468
; CURRENT APPLICATION NUMBER: US/60/465,241
; CURRENT FILING DATE: 2003-04-23
; NUMBER OF SEQ ID NOS: 258418
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
;
US-60-465-241-4765

Query Match      100.0%; Score 441; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 1.9e-47;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 60
    |
Db 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFR 71
    |
Qy 61 DKEICADPRVPWVKMILNKLQ 82
    |
Db 72 DKEICADPRVPWVKMILNKLQ 93
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Search completed: July 28, 2003, 04:18:49
Job time : 28.9412 secs
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:01:18 ; Search time 8.09664 Seconds
(without alignments)
973.617 Million cell updates/sec

Title: US-09-509-165A-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPVWVKMILNKLKLSQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR-73:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	147.5	33.4	91	1 A28815	monocyte chemoattr
2	142	32.2	92	2 I52322	macrophage inflam
3	139.5	31.6	91	1 A46339	monocyte chemoattr
4	132	29.9	92	2 A32393	macrophage inflam
5	131.5	29.8	92	1 A31767	monocyte chemoattr
6	130	29.5	99	2 JC5295	monocyte chemoattr
7	129	29.3	92	2 A30574	macrophage inflam
8	128	29.0	92	2 C30552	macrophage inflam
9	124	28.1	93	2 B35873	LD78-beta protein
10	121	27.4	120	2 I48147	monocyte chemoattr
11	119.5	27.1	109	2 A54678	monocyte chemoattr
12	113	25.6	99	1 A39296	monocyte chemoattr
13	113	25.6	99	2 JC2336	monocyte chemoattr
14	111	25.2	99	2 A60299	monocyte chemoattr
15	110	24.9	148	1 S07723	immediate-early se
16	109	24.7	99	2 JC2417	monocyte chemoattr
17	108.5	24.6	92	2 I46730	immune activation
18	108.5	24.6	97	2 JC4912	ectoxin precursor
19	102.5	23.2	148	1 A30209	PDGF-inducible JE
20	97	22.0	50	2 C60407	monocyte adherence
21	96.5	21.9	120	2 JE0177	lymphocyte and mon
22	96	21.8	99	2 JC2136	monocyte chemoattr
23	95.5	21.7	116	2 I49555	gene C10 protein -
24	93.5	21.2	125	2 I46857	monocyte chemoattr
25	93	21.1	96	2 I48099	ectoxin precursor
26	92	20.9	96	2 JC2478	ectoxin precursor
27	90.5	20.5	114	1 ETHUL	lymphotactin precu
28	87	19.7	96	2 A37236	I-309 protein prec
29	84.5	19.2	92	2 S24236	TCA3 protein - mou

monocytic cytokine
lymphotactin precu
monocyte chemoattr
neutrophil-activat
cytokine SDF-1-bet
platelet factor 4
transformation-ind
RSV-induced protei
pre-B-cell growth-
interleukin-8 homo
cytokine - mouse
C-X-C chemokine LI
platelet basic pro
alveolar macrophag
interleukin-8 - do
carboxy-terminal p

30 82.5 18.7 97 2 A48093
31 76 17.2 114 1 ETMSL
32 74.5 16.9 72 2 A55984
33 74.5 16.9 114 2 A55010
34 73 16.6 93 2 G01540
35 73 16.6 105 2 A26774
36 72 16.3 103 2 A26736
37 72 16.3 103 2 I50417
38 69 15.6 89 2 A53497
39 69 15.6 89 2 I53416
40 69 15.6 93 2 I81182
41 69 15.6 132 2 A57325
42 68 15.4 119 2 S42881
43 67 15.2 117 2 B44253
44 66 15.0 95 2 JN0841
45 66 15.0 539 2 JH0263

ALIGNMENTS

RESULT 1

A28815

monocyte chemoattractant cytokine RANTES precursor - human

N:Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES

C:Species: Homo sapiens (man)

C>Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998

C:Accession: A28815

R:Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M.;

J. Immunol. 141, 1018-1025, 1988

A:Title: A human T cell-specific molecule is a member of a new gene family.

A:Reference number: A28815; MUID:88285659; PMID:2456327

A:Accession: A28815

A:Molecule type: mRNA

A:Residues: 1-91 <SCH>

A:Cross-references: GB:M21121

C:Comment: The acronym RANTES reflects the description "Regulated upon Activation, NO

C:Genetics:

A:Gene: GDB:SCV45; D17S136E

A:Cross-references: GDB:I20749; OMIM:187011

A:Map position: 17q11.2-17q12

C:Superfamily: macrophage inflammatory protein

C:Keywords: chemotaxis; cytokine; immediate-early protein; Inflammation; T-cell

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-91/Product: T-cell protein RANTES #status predicted <MAT>

Query Match

Best Local Similarity 33.4%; Score 147.5; DB 1; Length 91;

Matches 28; Conservative 20; Mismatches 30; Indels 3; Gaps 2;

QY 1 LVLLAVALQA-TEAGPYGANNEDSVCCRDVVRVLRVVKVHFVYVTSDCSPRGVLLTF 59

Db 10 VLIATLALCAPASPYSS--DTTPCCFAIARPLPRAHIKEYFTSGKSNPAVVFVTR 67

QY 60 RDKEICADPRVPVWVKMILNKL 80

Db 68 KNRQVCANPEKKWVREYNLSL 88

RESULT 2

I52322

macrophage inflammatory protein-1alpha - rat

C:Species: Rattus norvegicus (Norway rat)

C>Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 16-Jul-1999

C:Accession: I52322

R:Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.

Biochem. Biophys. Res. Commun. 211, 289-295, 1995

A:Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat

A:Reference number: I52322; MUID:95298037; PMID:7779098

A:Accession: I52322

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-92 <RES>

A:Cross-references: EMBL:U02414; NID:g790632; PIDN:AAA80608.1; PID:g790633
 C:Superfamily: macrophage inflammatory protein

Query Match 32.2%; Score 142; DB 2; Length 92;
 Best Local Similarity 38.2%; Pred. No. 7.4e-10;
 Matches 26; Conservative 18; Mismatches 22; Indels 2; Gaps 2;
 QY 13 AGPYGANNEDSVCCRDYVRYRLPLRVVHFVWTSDCPRPGVLLTFRDKEICADPRVPW 72
 DB 23 SAPYCAD-TPTACCFSYGR-QIPKRFIADYFETSSLCSPQGVIFLTKNRQICADPKETW 80
 QY 73 VKMIINLKL 80
 DB 81 VOEYITEL 88

RESULT 3

A46539
 N:Alternate names: MuRantes
 C:Species: Mus musculus (house mouse)
 C:Date: 18-Jun-1993 #sequence revision 16-Aug-1996 #text_change 22-Jun-1999
 C:Accession: I48875; A46539; I48654; I56970
 R:Danoff, T.M.; Lalle, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
 J. Immunol. 152, 1182-1189, 1994
 A:Title: Cloning, genomic organization, and chromosomal localization of the scya5 gene
 A:Reference number: I48875; MUID:94132613; PMID:7507961
 A:Accession: I48875
 A:Status: Preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-91 <DAN>
 A:Cross-references: EMBL:U02298; NID:g460090; PIDN:AAA18302.1; PID:g460091
 R:Schall, T.J.; Simpson, N.J.; Mak, J.Y.
 Eur. J. Immunol. 22, 1477-1481, 1992
 A:Title: Molecular cloning and expression of the murine RANTES cytokine: structural and
 A:Reference number: A46539; MUID:92289805; PMID:1376260
 A:Accession: A46539
 A:Molecule type: mRNA
 A:Residues: 1-18, 'A', '20-91 <SCH>
 A:Cross-references: GB:S37648; NID:g250207; PIDN:AAB22330.1; PID:g250208
 A:Experimental source: macrophage cell line PUS-1.8
 A:Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIP:106770)
 R:Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.
 Mol. Cell. Biol. 14, 2914-2925, 1994
 A:Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region
 A:Reference number: I48654; MUID:94217689; PMID:7513046
 A:Accession: I48654
 A:Status: translation not shown; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-91 <SHI>
 A:Cross-references: EMBL:X70675; NID:g475205; PIDN:CAA50011.1; PID:g475206
 R:Neilson, E.G.; Krensky, A.
 Kidney Int. 41, 220-225, 1992
 A:Title: Isolation and characterization of cDNA from renal tubular epithelium encoding m
 A:Reference number: I56970; MUID:92277990; PMID:1375672
 A:Accession: I56970
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-40, 'E', '42-91 <NEI>
 A:Cross-references: GB:M77747; NID:g200649; PIDN:AAA40029.1; PID:g200650
 C:Comment: This chemoattractant for monocytes but not neutrophils is an immediate-early
 C:Genetics:
 A:Introns: 26/1; 63/2
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: Chemotaxis; cytokine; immediate-early protein; inflammation
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-91/Product: monocyte chemoattractant cytokine RANTES #status predicted <MAT>
 Query Match 31.6%; Score 139.5; DB 1; Length 91;
 Best Local Similarity 35.8%; Pred. No. 1.5e-09;
 Matches 29; Conservative 17; Mismatches 32; Indels 3; Gaps 2;
 QY 1 LVLLAVAL-QATEAGPYGANNEDSVCCRDYVRYRLPLRVVHFVWTSDCPRPGVLLTF 59

Db 10 ILTAAALCTPAPASPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSSKCSNLAVVVFVTR 67
 QY 60 RDEICADPRVPWVKMIINLKL 80
 Db 68 RNQVCANPERKKWQOEYINYL 88

RESULT 4

A23293
 macrophage inflammatory protein-1-alpha precursor - mouse
 N:Alternate names: heparin-binding chemotaxis protein; L2G35B protein; SCI/MIP-1a; MIP-1a
 C:Species: Mus musculus (house mouse)
 C:Date: 17-Jul-1992 #sequence revision 17-Jul-1992 #text change 16-Jul-1999
 C:Accession: S11685; A32393; S04533; A53885; A30552; PS0303; A27596; I56104
 R:Grover, M.; Lowe, S.; Graham, G.; Pagnell, I.; Plumb, M.
 Nucleic Acids Res. 18, 5561, 1990
 A:Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflamm-
 A:Reference number: S11685; MUID:91016858; PMID:2216738
 A:Accession: S11685
 A:Molecule type: DNA
 A:Residues: 1-92 <GRO>
 A:Cross-references: EMBL:X53372; NID:g54062; PIDN:CAA37452.1; PID:g297531
 R:Kwon, B.S.; Weiseman, S.M.
 Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
 A:Title: cDNA sequence of two inducible T-cell genes.
 A:Reference number: A32393; MUID:89184547; PMID:2784565
 A:Accession: A32393
 A:Molecule type: mRNA
 A:Residues: 1-92 <KWO>
 A:Cross-references: GB:J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525
 R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Gallegos, J.
 J. Exp. Med. 167, 1939-1944, 1988
 A:Title: Cloning and characterization of a cDNA for murine macrophage inflammatory pr
 A:Reference number: S04533; MUID:88258380; PMID:3290382
 A:Accession: S04533
 A:Molecule type: mRNA
 A:Residues: 1-48, 'E', '50-90, 'I', '92 <DA2>
 A:Cross-references: EMBL:X12531
 A:Note: the authors translated the codon CAG for residue 49 as Asp and ATT for res
 A:Note: the sequence has been corrected in reference A53885
 R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Luedke, C.; Gallegos, J.
 J. Exp. Med. 170, 2189, 1989
 A:Reference number: A53885
 A:Contents: erratum
 A:Accession: A53885
 A:Molecule type: mRNA
 A:Residues: 1-92 <DAV>
 A:Cross-references: EMBL:X12531; NID:g53122; PIDN:CAA31047.1; PID:g53123
 R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
 J. Immunol. 142, 679-687, 1989
 A:Title: A family of small inducible proteins secreted by leukocytes are members o
 s of various activation processes.
 A:Reference number: A30552; MUID:89093958; PMID:2521353
 A:Accession: A30552
 A:Molecule type: mRNA
 A:Residues: 1-21, 'L', '23-61, 'A', '63-92 <BRO>
 A:Cross-references: GB:M23447; NID:g533240; PIDN:AAA40146.1; PID:g533241
 R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatellis, G.; Wolpe, S.D.
 J. Exp. Med. 168, 2251-2259, 1988
 A:Title: Resolution of the two components of macrophage inflammatory protein 1, an c
 A:Reference number: JLO088; MUID:89067830; PMID:3058856
 A:Accession: PS0303
 A:Molecule type: mRNA
 A:Residues: 24-33, 'XX', '36-54 <SHE>
 R:Wolpe, S.D.; Davatellis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; ol
 J. Exp. Med. 167, 570-581, 1988
 A:Title: Macrophages secrete a novel heparin-binding protein with inflammatory and
 A:Reference number: A27596; MUID:88154745; PMID:3275154
 A:Accession: A27596
 A:Molecule type: protein
 A:Residues: 24-33, 'XX', '36-42 <WOL>

A>Note: 26-Met, 30-Pro, and 39-Thr were also found
 R;Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
 J. Immunol. 146, 4031-4040, 1991
 A>Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and conserv
 A;Reference number: 156104; MUID:91237116; PMID:2033269
 A;Accession: I56104
 A>Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 1-92 <RES>
 A;Cross-references: GB:M73061; NID:g199694; PIDN:AAA39707.1; PID:g199695
 C;Comment: This protein is a monokine.
 C;Genetics:
 A;Introns: 23/3; 26/1; 63/2
 C;Superfamily: macrophage inflammatory protein
 C;Keywords: heparin binding
 F;1-23/Domain: signal sequence #status predicted <SIG>
 F;24-92/Product: macrophage inflammatory protein #status experimental <MAT>
 Query Match 29.9%; Score 132; DB 2; Length 92;
 Best Local Similarity 36.8%; Pred. No. 1.2e-08;
 Matches 25; Conservative 17; Mismatches 24; Indels 2; Gaps 2;
 QY 13 AGPYGANNEDSVCCRDYVRLPLRVVKKHFWYTSDCPRGCVLLTFRDKEICADPRVPW 72
 DB 23 SAPYGD-TPTACCFYSR-KIPROFIVDYFETSSLCSPQGVIFLTRNRQICADSKETW 80
 QY 73 VKMLNKL 80
 DB 81 VQEVITDL 88
 RESULT 5
 A31767
 macrophage inflammatory protein 1-beta precursor [validated] - human
 N;Alternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene
 protein 2 (Act-2); T-cell activation protein gamma
 C;Species: Homo sapiens (man)
 C;Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
 C;Accession: JH0319; A40978; A37411; B30574; B45817; D30552
 R;Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequig
 Mol. Immunol. 27, 1091-1102, 1990
 A>Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
 A;Reference number: JH0319; MUID:91061800; PMID:2247088
 A;Accession: JH0319
 A>Status: translation not shown
 A;Molecule type: DNA
 A;Residues: 1-92 <BAI>
 A;Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
 A;Experimental source: natural killer cell, strain CD3-CD2+, F5, 5IIE5
 R;Napolitano, M.; Modi, W.S.; Cevalero, S.J.; Gnarr, J.R.; Seuanez, H.N.; Leonard, W.J.
 J. Biol. Chem. 266, 17531-17536, 1991
 A>Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsive
 A;Reference number: A40978; MUID:91373378; PMID:1894635
 A;Accession: A40978
 A;Molecule type: DNA
 A;Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
 A;Cross-references: GB:M69201; NID:g178021
 A;Note: 15-Ala was also found
 R;Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
 Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
 A>Title: Identification, cloning, and characterization of an immune activation gene.
 A;Reference number: A31767; MUID:89071764; PMID:2462251
 A;Accession: A31767
 A;Molecule type: mRNA
 A;Residues: 1-92 <LIP>
 A;Cross-references: GB:J04130; NID:g178017; PIDN:AAA51576.1; PID:g178018
 R;Chang, H.C.; Reinherz, E.L.
 Eur. J. Immunol. 19, 1045-1051, 1989
 A>Title: Isolation and characterization of a cDNA encoding a putative cytokine which is
 A;Reference number: A37411; MUID:89325421; PMID:2568930
 A;Accession: A37411
 A;Molecule type: mRNA
 A;Residues: 1-92 <CHA>

A;Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
 R;Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
 J. Immunol. 142, 1582-1590, 1989
 A>Title: Mitogenic activation of human T cells induces two closely related genes which
 A;Reference number: A30574; MUID:89140347; PMID:2521882
 A;Accession: B30574
 A;Molecule type: mRNA
 A;Residues: 1-19, 'L', 21-92 <ZIP>
 A;Cross-references: GB:M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
 R;Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
 J. Immunol. 143, 2907-2916, 1989
 A>Title: A novel polypeptide secreted by activated human T lymphocytes.
 A;Reference number: A45817; MUID:90038522; PMID:2809212
 A;Accession: B45817
 A;Molecule type: mRNA
 A;Residues: 7-55, 'I', 57-79, 'T', 81-92 <MIL>
 A;Cross-references: GB:M57503; NID:g339726; PIDN:AAA36752.1; PID:g339727
 R;Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
 J. Immunol. 142, 679-687, 1989
 A>Title: A family of small inducible proteins secreted by leukocytes are members of a
 s of various activation processes.
 A;Reference number: A30552; MUID:89093958; PMID:2521353
 A;Accession: D30552
 A;Molecule type: mRNA
 A;Residues: 1-39, 'REASS', 46-92 <BRO>
 A;Cross-references: GB:M23502; NID:g533212; PIDN:AAA36656.1; PID:g533213
 R;Clare, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
 submitted to the Brookhaven Protein Data Bank, January 1994
 A;Reference number: A52206; PDB:1HUM
 A;Contents: annotation; conformation and disulfide bond assignments by (1)H-NMR, res
 C;Comment: This protein is secreted by activated lymphocytes and monocytes. It is bou
 C;Genetics:
 A;Gene: GDB:LAG1
 A;Cross-references: GDB:127451; OMIM:153335
 A;Map position: 17q21-17q21
 A;Introns: 26/1; 64/2
 C;Superfamily: macrophage inflammatory protein
 C;Keywords: chemotaxis; cytokine; inflammation
 F;1-23/Domain: signal sequence #status predicted <SIG>
 F;24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
 F;34-58,35-74/Disulfide bonds: #status experimental
 Query Match 29.8%; Score 131.5; DB 1; Length 92;
 Best Local Similarity 36.5%; Pred. No. 1.4e-08;
 Matches 27; Conservative 12; Mismatches 34; Indels 1; Gaps 1;
 QY 1 LVLVALQATGATGPGYCANMEDSVCCRDYVRLPLRVVKKHFWYTSDCPRGCVLLTFR 60
 DB 11 LMLVAAPFCSPALAPMGSD-PPTACCFSTARKLPNRFVVDYVETSSLCSPQVAVFQTKR 69
 QY 61 DKEICADPRVPWVK 74
 DB 70 SKQVCADPSESWSQ 83
 RESULT 6
 JC5295
 monocyte chemotactic protein-2 precursor - human
 C;Species: Homo sapiens (man)
 C;Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
 C;Accession: JC5295
 R;Van Coillie, E.; Froyen, G.; Nomiya, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van
 Biochem. Biophys. Res. Commun. 231, 726-730, 1997
 A>Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression
 A;Reference number: JC5295; MUID:97224420; PMID:9070881
 A;Accession: JC5295
 A;Molecule type: mRNA
 A;Residues: 1-99 <VAN>
 A;Cross-references: GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924938
 A;Experimental source: bone marrow
 C;Comment: This protein belongs to the beta-chemokine family which is one of the major
 tis and in tumor biology, and contribute to the trafficking and recruitment of the res
 C;Genetics:

A:Gene: mcp-2
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>

Query Match 29.5%; Score 130; DB 2; Length 99;
Best Local Similarity 33.7%; Pred. No. 2.2e-08;
Matches 29; Conservative 15; Mismatches 36; Indels 6; Gaps 2;
QY 3 LLVALQATEAGPYGANMEDSV-CCRDVVRVRLPL-RVVKHFYWTSDSCPRPGVVL 56
DB 7 LCLLLMAATFSQGLAQPDVSIPITCFNINRKPIQRLESYTRITNIQCPKRAVIF 66
QY 57 LTFRDKEICADPRVPVWVKMILNKLQ 82
DB 67 KTORGEVCADPKERWVRDSMKHLQ 92

RESULT 7

A30574
N:Alternate names: LD78-alpha protein precursor - human
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>
QY 3 LLVALQATEAGPYGANMEDSV-CCRDVVRVRLPL-RVVKHFYWTSDSCPRPGVVL 56
DB 7 LCLLLMAATFSQGLAQPDVSIPITCFNINRKPIQRLESYTRITNIQCPKRAVIF 66
QY 57 LTFRDKEICADPRVPVWVKMILNKLQ 82
DB 67 KTORGEVCADPKERWVRDSMKHLQ 92
A:Gene: GDB:SCYA3
A:Cross-references: GDB:120368; OMIM:182283
A:Map position: 17q11-17q21
C:Superfamily: macrophage inflammatory protein
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
F:33-57,34-73/Disulfide bonds: #status predicted
Query Match 29.3%; Score 129; DB 2; Length 92;
Best Local Similarity 34.5%; Pred. No. 2.7e-08;
Matches 20; Conservative 14; Mismatches 24; Indels 0; Gaps 0;
QY 23 SVCCRDYVRVRLPLRVVKHFYWTSDSCPRPGVVLTFRDKEICADPRVPVWVKMILNKL 80

DB

31 TACCFSTYRQIPQFIADYFETSSQCKPGVIFLTRSRQVCADPSEWQKYVSDL 88

RESULT 8

C30552
N:Alternate names: macrophage inflammatory protein 1-beta precursor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
C:Accession: C30552; J0088; PS0304; S22042
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A:Title: A family of small inducible proteins secreted by leukocytes are members of a
s of various activation processes.
A:Reference number: A30552; MUID:89093958; PMID:2521353
A:Accession: C30552
A:Molecule type: mRNA
A:Residues: 1-92 <BRO>
A:Cross-references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245
R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.-
J. Exp. Med. 168, 2251-2259, 1988
A:Title: Resolution of the two components of macrophage inflammatory protein 1, an
A:Reference number: J0088; MUID:89067830; PMID:3058856
A:Accession: J0088
A:Molecule type: mRNA
A:Residues: 1-92 <SHE>
A:Cross-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697
A:Accession: PS0304
A:Molecule type: protein
A:Residues: 24-33, 'XX', '36', 'X', '38' <SH2>
R:Daubersies, P.; Lepretre, F.; Baillieu, B.; Grove, M.; Pragnell, I.; Plumb, M.
submitted to the EMBL Data Library, October 1991
A:Description: Sequence of the murine macrophage inflammatory protein 1b gene.
A:Reference number: S22042
A:Accession: S22042
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-92 <DAU>
A:Cross-references: EMBL:X62502; NID:g53126; PIDN:CAA44364.1; PID:g53127
C:Comment: This protein is a monokine.
C:Genetics:
A:Introns: 26/1; 64/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>-
F:76/Binding site: carbohydrate (Asn) (covalent) #status predicted
Query Match 29.0%; Score 128; DB 2; Length 92;
Best Local Similarity 38.3%; Pred. No. 3.6e-08;
Matches 31; Conservative 12; Mismatches 36; Indels 2; Gaps 2;
QY 1 LVLLAVALQATE-AGPYGANMEDSVCCRDYVRVRLPLRVVKHFYWTSDSCPRPGVVLTF 59
DB 10 LLLVLAFAFCGFSAPMGSDPPTS-CCFSYTSRQLHRSFVMDYETTSLSLCSKPAVYVFLTK 68
QY 60 RDKKEICADPRVPVWVKMILNKL 80
DB 69 RGRQICANPSEWPVTEYMSDL 89
RESULT 9
B35673
LD78-beta protein precursor - human
N:Alternate names: macrophage inflammatory protein homolog GOS19-2; small inducible
C:Species: Homo sapiens (man)
C:Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C:Accession: B35673; B30412; S10157; B30908
R:Nakao, M.; Nomiya, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
A:Title: Structures of human genes coding for cytokine LD78 and their expression.
A:Reference number: A35673; MUID:90287155; PMID:1694014

A:Accession: B35673
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-93 <NAK>
A:Cross-references: GB:D90145; NID:g219907; PIDN:BAAL14173.1; PID:g219908
R:Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A:Title: Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation
A:Reference number: A30412; MUID:91103879; PMID:2271120
A:Accession: B30412
A:Status: preliminary; not compared with conceptual translation.
A:Molecule type: DNA
A:Residues: 1-93 <BLU>
A:Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
R:Irvig, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Sieber
Nucleic Acids Res. 18, 3261-3270, 1990
A:Title: Two inflammatory mediator cytokine genes are closely linked and variably amplified
A:Reference number: S10157; MUID:90287702; PMID:1972363
A:Accession: S10157
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-93 <IRV>
A:Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666
C:Comment: This protein is a member of a "small inducible" or "activation specific" gene
C:Genetics:
A:Gene: GDB:SCYA4
A:Cross-references: GDB:120369; OMIM:182284
A:Map position: 17q11-17q21
A:Introns: 26/1; 64/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-93/Product: LD78-beta protein #status predicted <MAT>

Query Match 28.1%; Score 124; DB 2; Length 93;
Best Local Similarity 31.2%; Pred. No. 1.1e-07;
Matches 25; Conservative 17; Mismatches 36; Indels 2; Gaps 2;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHFVWTSDSCPRPGVLLTFR 60
Db 12 LCTMALCNQVLSA-PLAAD-TTACCFTSYTSRQIPONFNADYFETSSQCSKSFVPLTR 69
QY 61 DKEICADPRVPVVKMILNKL 80
Db 70 GRQVCADPEEWVKYVSDL 89

RESULT 10
I48147
monocyte chemoattractant protein-1 - guinea pig
C:Species: Cavia porcellus (guinea pig)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
C:Accession: I48147
R:Yoshimura, T.
J. Immunol. 150, 5025-5032, 1993
A:Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of
A:Reference number: I48147; MUID:93267104; PMID:8496603
A:Accession: I48147
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-120 <RES>
A:Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821
C:Genetics:
A:Gene: MCP-1
C:Superfamily: macrophage inflammatory protein

Query Match 27.4%; Score 121; DB 2; Length 120;
Best Local Similarity 36.1%; Pred. No. 3.2e-07;
Matches 30; Conservative 14; Mismatches 35; Indels 4; Gaps 3;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYRVRLPLRVVVKHF-YWTSDCPRPGVLLTFR 59
Db 11 LVITEATFCSLLMAQPDGVN--TPTCCYTENK-QIPLKRVKGYERITSSRCPCQEAIVFRTL 67

QY 60 RDKEICADPRVPVVKMILNKL 82
Db 68 KNKEVCADPTQKWQDYIAKLQ 90

RESULT 11

A54678
monocyte chemoattractant protein 3 precursor - human
N:Alternate names: monocyte chemoattractant protein MCP-3
C:Species: Homo sapiens (man)
C:Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999
C:Accession: A54678; JCI1478; S32222
R:Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys,
Genomics 21, 403-408, 1994
A:Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to
A:Reference number: A54678; MUID:94375065; PMID:7916328
A:Accession: A54678
A:Molecule type: DNA
A:Residues: 1-109 <OPD>
A:Cross-references: GB:X72309
R:Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.
Biochem. Biophys. Res. Commun. 191, 535-542, 1993
A:Title: Human monocyte chemoattractant protein-3 (MCP-3): Molecular cloning of the cDNA
A:Reference number: JCI1478; MUID:93213290; PMID:8461011
A:Accession: JCI1478
A:Molecule type: mRNA
A:Residues: 1-109 <OP2>
A:Cross-references: GB:X72308; GB:S57464; NID:g3928270; PIDN:CAA51055.1; PID:g313708
R:Minty, A.; Chalon, P.; Guillemot, J.C.; Kagnad, M.; Liauzun, P.; Magazin, M.; Milou
submitted to the EMBL Data Library, March 1993
A:Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoat
A:Reference number: S32222
A:Accession: S32222
A:Molecule type: mRNA
A:Residues: 1-109 <MIN>
A:Cross-references: EMBL:X71087; NID:g288396; PIDN:CAA50405.1; PID:g288397
C:Comment: This protein induces proteinase secretion and chemotaxis by macrophages an
C:Genetics:
A:Gene: GDB:SCYA7; SCYA6; MCP-3
A:Cross-references: GDB:138473; OMIM:158106
A:Map position: 17q11-17q12
A:Introns: 36/1; 75/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine; glycoprotein; inflammation
F:1-33/Domain: signal sequence #status predicted <SIG>
F:34-109/Product: monocyte chemoattractant protein 3 #status predicted <MAT>
F:39/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 27.1%; Score 119.5; DB 2; Length 109;
Best Local Similarity 35.7%; Pred. No. 4.5e-07;
Matches 30; Conservative 12; Mismatches 39; Indels 3; Gaps 3;

QY 1 LVLLAVALQATE-AGPYGANNEDSVCCRDYRVRLP-LRVVVKHFYWTSDSCPRPGVLLT 58
Db 20 LLITAAAFSPQGLAQPGVIN-TSTTCYCFINKKIPORLESYVRTTSSHCPCREAVIFKT 78

QY 59 FRDKEICADPRVPVVKMILNKL 82
Db 79 KLDKEICADPTQKWQDFMKHLDR 102

RESULT 12

A3296
monocyte chemoattractant protein 1 precursor - bovine
N:Alternate names: monocyte chemoattractant factor 1; seminal plasma protein P6
C:Species: Bos primigenius taurus (cattle)
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C:Accession: A3296; B39296
R:Wempe, F.; Henschen, A.; Scheit, K.H.
DNA Cell Biol. 10, 671-679, 1991
A:Title: Gene expression and cDNA cloning identified a major basic protein constituent
A:Reference number: A3296; MUID:92096117; PMID:1721821

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 4.30672 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-2_COPY_12_93

Perfect score: 441

Sequence: 1 LVLLAVALQATEAGPYGANN.....EICADPRVPVVKMLNKLQ 82

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	441	100.0	93	1 SY22_HUMAN	O00626 homo sapien
2	310	70.3	92	1 SY22_MOUSE	O88430 mus musculu
3	155	35.1	90	1 SY04_CHICK	O90826 gallus gall
4	151	34.2	89	1 SY18_HUMAN	P55774 h small ind
5	147.5	33.4	91	1 SY05_HUMAN	P13501 homo sapien
6	142	32.2	92	1 SY03_RAT	P50229 rattus norv
7	140.5	31.9	92	1 SY05_RAT	P50231 rattus norv
8	140	31.7	104	1 SY12_MOUSE	Q62401 mus musculu
9	139.5	31.6	91	1 SY05_MOUSE	P30882 mus musculu
10	138.5	31.4	92	1 SY04_RAT	P50230 rattus norv
11	135	30.6	93	1 SY14_HUMAN	O16627 homo sapien
12	132.5	30.0	91	1 SY05_BOVIN	O97919 bos taurus
13	132	29.9	92	1 SY03_MOUSE	P10855 mus musculu
14	131.5	29.8	92	1 SY04_HUMAN	P13236 h small ind
15	130	29.5	94	1 VM12_KSHV	O98157 kaposi's sa
16	130	29.5	99	1 SY08_HUMAN	P80075 homo sapien
17	129	29.3	92	1 SY03_HUMAN	P10147 homo sapien
18	128.5	29.1	91	1 SY05_CAVPO	P97272 cavia porce
19	128	29.0	92	1 SY04_MOUSE	P14097 mus musculu
20	125	28.3	113	1 SY15_HUMAN	Q16663 homo sapien
21	124	28.1	93	1 SY3L_HUMAN	P16619 homo sapien
22	122.5	27.8	98	1 SY13_HUMAN	O99616 homo sapien
23	121	27.4	120	1 SY02_CAVPO	O08782 cavia porce
24	119.5	27.1	99	1 SY07_HUMAN	P80098 homo sapien
25	119	27.0	94	1 SY17_HUMAN	Q92583 homo sapien
26	118.5	26.9	70	1 REG1_BOVIN	P82943 bos taurus
27	118.5	26.9	98	1 SY19_HUMAN	O99731 homo sapien
28	115	26.1	99	1 SY02_MACFA	O99MVD macaca fasc
29	113	25.6	99	1 MCPA_BOVIN	P28291 bos taurus
30	111	25.2	99	1 SY02_HUMAN	P13500 homo sapien
31	110	24.9	148	1 SY02_RAT	P14844 rattus norv
32	109.5	24.8	97	1 BOTA_HUMAN	P51671 homo sapien
33	109.5	24.8	108	1 SY19_MOUSE	O70460 mus musculu

ALIGNMENTS

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DE	Small inducible cytokine A22 precursor (CC122) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RN	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RL	J. Exp. Med. 185:1595-1604(1997).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97460118; PubMed=9312138;			
RA	Chang M.-S., McIninch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RL	J. Biol. Chem. 272:25229-25237(1997).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE=99425270; PubMed=10493829;			
RA	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R., Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RL	Genomics 60:295-308(1999).			
RN	[4]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Pancreas, and Spleen;			
RA	Strausberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION			
RX	MEDLINE=98104168; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

O9jkc0 mus musculu
O89093 mus musculu
P49873 sus scrofa
P46632 oryctolagus
O09141 bos taurus
P52203 canis famli
O92121 mus musculu
O00175 homo sapien
P10148 mus musculu
O00585 homo sapien
P55773 homo sapien

34 109.5 24.8 119 1 SY24_MOUSE
35 109 24.7 97 1 SY20_MOUSE
36 109 24.7 99 1 SY08_PIG
37 108.5 24.6 92 1 SY04_RABIT
38 107 24.3 99 1 SY08_BOVIN
39 107 24.3 101 1 SY02_CANFA
40 106 24.0 94 1 SY26_HUMAN
41 104 23.6 97 1 SY08_MOUSE
42 103.5 23.5 119 1 SY24_HUMAN
43 102.5 23.2 148 1 SY02_MOUSE
44 99 22.4 134 1 SY21_HUMAN
45 98 22.2 120 1 SY23_HUMAN

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RT chemokine receptor 4.":
RL J. Biol. Chem. 273:1764-1768(1998).
CC -|- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
DR EMBL; U83171; AAB58360.1; -.
DR EMBL; U83239; AAB53372.1; -.
DR EMBL; AC004382; AAC24306.1; -.
DR EMBL; BC027952; AAB27952.1; -.
DR HSSP; Q98157; ICM9.
DR GENE; HGNC:10621; SCYA22.
DR MIM; 602957; -.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 24 SMALL INDUCIBLE CYTOKINE A22.
FT CHAIN 25 93 BY SIMILARITY.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 100.0%; Score 441; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.2e-46;
Matches 82; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWVKMINKLSQ 82
DB 72 DKEICADPRVPWVKMINKLSQ 93

RESULT 2
SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCU22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;

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RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Shantiel C., Pardoll E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -|- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
DR EMBL; AF052505; AAC40200.1; -.
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;

Query Match 70.3%; Score 310; DB 1; Length 92;
Best Local Similarity 65.4%; Pred. No. 1.4e-30;
Matches 53; Conservative 18; Mismatches 10; Indels 0; Gaps 0;

QY 1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 60
DB 12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPWVKMINKLS 81
DB 72 NRDCADPRQVWVKLLHKL 92

RESULT 3
SY04_CHICK STANDARD; PRT; 90 AA.
ID SY04_CHICK
AC Q90826; Q910C9;
DT 01-NOV-1997 (Rel. 35, Created)
DT 15-JUN-2002 (Rel. 41, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
DE protein 1-beta homolog).
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RN SEQUENCE FROM N.A.

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SY05_RAT
ID SY05_RAT STANDARD; PRT; 92 AA.
AC P50231;
DF 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta).
GN SCYA5.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN
RP SEQUENCE FROM N.A.
RC STRAIN=Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Ward P.A.;
RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES. MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
CC EMBL: U06436; AAA96499.1;
CC HSP: P13501; LRIN.
CC InterPro: IPR000827; CC_chemkine_sml.
CC InterPro: IPR001811; Chemokine_IL8.
CC Pfam: PF00048; IL8; 1.
CC SMART: SM00199; SCY; 1.
CC SMART: PS00472; SMALL_CYTOKINES_CC; 1.
CC CYTOKINE; Chemotaxis; T-cell; Signal; Inflammatory response.
KW SIGNAL
FT CHAIN 1 24 POTENTIAL.
FT DISULFID 25 92 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10170 MW; B4FBEC2B4208ABC6 CRC64;
Query Match 31.9%; Score 140.5; DB 1; Length 92;
Best Local Similarity 35.8%; Pred. No. 3.9e-10;
Matches 29; Conservative 18; Mismatches 31; Indels 3; Gaps 2;
QY 1 LVLLAVAL-QATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTF 59
Db 11 VILVAAALCTPPVSPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSNLAVVFTVR 68
QY 60 RKEICADPRVPVVKMLNKL 80
Db 69 RNRQVCANPEKKVQYIYNL 89
RESULT 8
ID SY12_MOUSE STANDARD; PRT; 104 AA.
AC Q62401; Q9QVD6;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A12 precursor (CCL12) (Monocyte chemotactic
DE protein 5) (MCP-5) (MCP-1 related chemokine).
DE SCYA12 OR MCP5.
GN Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN
RP SEQUENCE FROM N.A.
RC STRAIN=B10.S/J, BALB/c, DBA/2J, NOD/LTJ, and SJL/J; TISSUE=Spleen;
RA Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W.,
RA Blankenhorn E.P.;
RL "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scyal2
RL (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are
RL candidates for eae7, a locus controlling susceptibility to monophasic
RL remitting/nonrelapsing experimental allergic encephalomyelitis."
RL J. Immunol. 163:2262-2266(1999).
CC -1- FUNCTION: CHEMOATRACTANT FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
CC AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
CC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
CC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
CC PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
CC THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
CC BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
CC -1- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
CC EMBL: U50712; AAB50053.1;
CC EMBL: U66670; AAB49424.1;
CC EMBL: AF065934; AAF15384.1;
CC EMBL: AF065935; AAF15385.1;
CC EMBL: AF065936; AAF15386.1;
CC EMBL: AF065937; AAF15387.1;
CC EMBL: AF065938; AAF15388.1;
CC HSP: P13500; IDOL.
CC MGD: MGI:108224; Scyal2.
CC InterPro: IPR000827; CC_chemkine_sml.
CC InterPro: IPR001811; Chemokine_IL8.
CC Pfam: PF00048; IL8; 1.
CC SMART: SM00199; SCY; 1.
CC SMART: PS00472; SMALL_CYTOKINES_CC; 1.
CC CYTOKINE; Chemotaxis; Signal; Inflammatory response.
KW SIGNAL
FT CHAIN 1 22 SMALL INDUCIBLE CYTOKINE A12.
FT DISULFID 23 104 BY SIMILARITY.
FT DISULFID 33 58 BY SIMILARITY.
FT DISULFID 34 74 BY SIMILARITY.
FT VARIANT 94 104 OTFLPSCLG -> RT (IN STRAIN SJL/J).
SQ SEQUENCE 104 AA; 11659 MW; 8D102F4FF4CC3DBF CRC64;
Query Match 31.7%; Score 140; DB 1; Length 104;
```

```
OX NCBI_TaxID=10090;
RN
RP SEQUENCE FROM N.A.
RC STRAIN=97079149; PubMed=8920881;
RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C.,
RA Werthil B.K., Gutierrez-Ramos J.C.;
RT "Distinct expression and function of the novel mouse chemokine
RT monocyte chemoattractant protein-5 in lung allergic inflammation."
RL J. Exp. Med. 184:1939-1951(1996).
RN
RP SEQUENCE FROM N.A.
RC MEDLINE=97149438; PubMed=8996246;
RA Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;
RA "Murine monocyte chemoattractant protein (MCP)-5: a novel CC
RT chemokine that is a structural and functional homologue of human
RT MCP-1."
RL J. Exp. Med. 185:99-109(1997).
RN
RP SEQUENCE FROM N.A.
RC STRAIN=B10.S/J, BALB/c, DBA/2J, NOD/LTJ, and SJL/J; TISSUE=Spleen;
RA Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W.,
RA Blankenhorn E.P.;
RL "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scyal2
RL (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are
RL candidates for eae7, a locus controlling susceptibility to monophasic
RL remitting/nonrelapsing experimental allergic encephalomyelitis."
RL J. Immunol. 163:2262-2266(1999).
CC -1- FUNCTION: CHEMOATRACTANT FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
CC AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
CC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
CC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
CC PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
CC THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
CC BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
CC -1- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
CC EMBL: U50712; AAB50053.1;
CC EMBL: U66670; AAB49424.1;
CC EMBL: AF065934; AAF15384.1;
CC EMBL: AF065935; AAF15385.1;
CC EMBL: AF065936; AAF15386.1;
CC EMBL: AF065937; AAF15387.1;
CC EMBL: AF065938; AAF15388.1;
CC HSP: P13500; IDOL.
CC MGD: MGI:108224; Scyal2.
CC InterPro: IPR000827; CC_chemkine_sml.
CC InterPro: IPR001811; Chemokine_IL8.
CC Pfam: PF00048; IL8; 1.
CC SMART: SM00199; SCY; 1.
CC SMART: PS00472; SMALL_CYTOKINES_CC; 1.
CC CYTOKINE; Chemotaxis; Signal; Inflammatory response.
KW SIGNAL
FT CHAIN 1 22 SMALL INDUCIBLE CYTOKINE A12.
FT DISULFID 23 104 BY SIMILARITY.
FT DISULFID 33 58 BY SIMILARITY.
FT DISULFID 34 74 BY SIMILARITY.
FT VARIANT 94 104 OTFLPSCLG -> RT (IN STRAIN SJL/J).
SQ SEQUENCE 104 AA; 11659 MW; 8D102F4FF4CC3DBF CRC64;
Query Match 31.7%; Score 140; DB 1; Length 104;
```


Best Local Similarity 38.4%; Pred. No. 5.1e-10;
Matches 33; Conservative 13; Mismatches 34; Indels 6; Gaps 2;

QY 3 LLAVALQATGAGPYGANNMEDSV-----CCRDYVRYRLPLRVVKHF-YWTSDSCPRGVVL 56
DB 6 LCLLLIANTISPOVLAGDPAVSTPTCCYVNVVKQIHVKLSYRRITSSQCPREAVIF 65

QY 57 LTFRDKEICADPRVPWVKMLNKLQS 82
DB 66 RTILDKEICADPRKWKVNSINHLDK 91

RESULT 9
ID SY05_MOUSE STANDARD; PRT; 91 AA.
AC P30882;
DT 01-JUL-1993 (Rel. 26, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 13-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta) (Murantes).
GN SCY5.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP MEDLINE-92277950; PubMed-1375672;
RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
RA Krensky A.M., Neillon E.G.;
RT "Isolation and characterization of cDNA from renal tubular epithelium
RT encoding murine Rantes.";
RL Kidney Int. 41:220-225(1992).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE-92289805; PubMed-1376260;
RA Schall T.J., Simpson N.J., Mak J.Y.;
RT "Molecular cloning and expression of the murine RANTES cytokine:
RT structural and functional conservation between mouse and man.";
RL Eur. J. Immunol. 22:1477-1481(1992).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=NIH Swiss;
RX MEDLINE-94132613; PubMed-7507961;
RA Danoff T.M., Talley P.A., Chang Y.S., Heeger P.S., Neillon E.G.;
RT "Cloning, genomic organization, and chromosomal localization of the
RL Scy5 gene encoding the murine chemokine RANTES.";
RN J. Immunol. 152:1182-1189(1994).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RX MEDLINE-94217689; PubMed-7513046;
RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
RA Farnakas W.A.;
RT "Definition of a lipopolysaccharide-responsive element in the 5'-
RT flanking regions of Murantes and crg-2.";
RL Mol. Cell. Biol. 14:2914-2925(1994).
RN [5]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/CJ.B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
RA Ma R.Z., Teuscher C.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
CC EMBL; M77747; AAA40029.1; -
CC EMBL; S37648; AAB22330.1; -
CC EMBL; U02298; AAA18302.1; -
CC EMBL; X70675; CAA50011.1; -
CC EMBL; AF065944; AAC17511.1; -
CC EMBL; AF065945; AAC17512.1; -
CC EMBL; AF065946; AAC17513.1; -
CC EMBL; AF065947; AAC17514.1; -
CC HSSP; P13501; 1RTN.
CC MGD; MGI:98262; SCY5.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCV; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 23 POTENTIAL.
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
FT CONFLICT 19 19 T -> A (IN REF. 2).
FT CONFLICT 41 41 A -> E (IN REF. 1).
SQ SEQUENCE 91 AA; 10071 MW; 5DFD66F4684FE1C8 CRC64;
Query Match 31.6%; Score 139.5; DB 1; Length 91;
Best Local Similarity 35.8%; Pred. No. 5.1e-10;
Matches 29; Conservative 17; Mismatches 32; Indels 3; Gaps 2;

QY 1 LVLVALQ-ATGAGPYGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGVVLTF 59
DB 10 ILTAAALCTPAPSPYGS--DTTPCCFAYLSLALPRAHVKEYFTSSKCSNLAVVFTVR 67

QY 60 RDKKICADPRVPWVKMLNKL 80
DB 68 RNRQVCANPEKKWQVEYNIL 88

RESULT 10
ID SY04_RAT STANDARD; PRT; 92 AA.
AC P50230;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
DE protein 1-beta) (MIP-1-beta).
GN SCY44 OR MIP1B.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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DR EMBL: U06434; AAA96497.1; -
DR HSP: P13236; 1HUM.
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23
FT CHAIN 24 92
FT DISULFID 34 58
FT DISULFID 35 74
FT SEQUENCE 92 AA; 10234 MW; 60B451EEBC7103D CRC64;
Query Match 31.4%; Score 138.5; DB 1; Length 92;
Best Local Similarity 36.2%; Pred. No. 6.9e-10;
Matches 29; Conservative 14; Mismatches 36; Indels 1; Gaps 1;
QY 1 LVLLAVALQAEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRPGVVLLTFR 60
DB 11 LLLVAFCDSVLSPIGSDPPTS-CCFSYTRKTHRNFMVDYETSSLCSPAVVFLTKK 69
QY 61 DKEICADPRVPWVKMLNKL 80
DB 70 GRQICADPSPWNEVNDL 89
RESULT 11
SY14_HUMAN
ID SY14_HUMAN STANDARD; PRT; 93 AA.
AC Q16627; Q13954;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
DE (HCC-1/HCC-3) (NCC-2).
GN SCYA14 OR NCC2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_taxid=9606;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
RC TISSUE=Bone marrow;
RX MEDLINE=96136773; PubMed=8551235;
RA Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,
RA Kubies M., Tomeczkowski J., Kirchhoff K., Raida M., Adermann K.,
RA Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
RA Baggiolini M., Forssmann W.-G.;
RT "HCC-1, a novel chemokine from human plasma.";
RL J. Exp. Med. 183:295-299(1996).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RX MEDLINE=98263352; PubMed=9600961;
RA Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
RT "HCC-2, a human chemokine: gene structure, expression pattern, and
RT biological activity.";
RL Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=95228475; PubMed=10213461;
RA Nomiyama H., Fukuda S., Ito M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MIP-1, HCC-2, LEC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
CC -1- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
CC RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED
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CC INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,
CC AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T
CC LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
CC PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
CC ARE PRODUCED BY ALTERNATIVE SPLICING.
CC -1- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
CC TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
CC MARROW. PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
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DR EMBL: Z49270; CAA89264.1; -
DR EMBL: Z70292; CAA94307.1; -
DR EMBL: Z70293; CAA94309.1; -
DR EMBL: Z49269; CAA89263.1; -
DR EMBL: AF088219; AAC63329.1; -
DR EMBL: AF088219; AAF23982.1; -
DR HSP: P13236; 1HUM.
DR Genew: HGNC:10612; SCYA14.
DR MIM: 601392; -
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Signal; Alternative splicing.
FT SIGNAL 1 19
FT CHAIN 20 93
FT DISULFID 35 59
FT DISULFID 36 75
FT VARSPLIC 27 27
FT SEQUENCE 93 AA; 10678 MW; DDB899DC9148836 CRC64;
Query Match 30.6%; Score 135; DB 1; Length 93;
Best Local Similarity 28.2%; Pred. No. 1.8e-09;
Matches 24; Conservative 21; Mismatches 32; Indels 8; Gaps 2;
QY 2 VLLAVAL-----QATEAGPYGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRPGVVLL 57
DB 12 LLITIALGKTKESSSRGPY----HPSECCFTYTYKIPQRIMDYETNSQCKPGIVFI 67
QY 58 TFRDKEICADPRVPWVKMLNKL 82
DB 68 TKRGHSVCTNPSPDKWVDYIKDKME 92
RESULT 12
SY05_BOVIN
ID SY05_BOVIN STANDARD; PRT; 91 AA.
AC O97919;
DT 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta).
DE SCYA5.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_taxid=9913;
RN [1]
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DR EMBL; AF065942; AAC17509.1; -.
DR EMBL; AF065943; AAC17510.1; -.
DR PIR; A27596; A27596.
DR PIR; A30552; A30552.
DR PIR; A32393; A32393.
DR PIR; S04533; S04533.
DR PIR; S11685; S11685.
DR HSSP; P13236; 1HUM.
DR MGD; MGI:98260; Scya3.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR CYTOKINE; Chemotaxis; Inflammatory response; Signal.
KW CYTOKINE; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23 SMALL INDUCIBLE CYTOKINE A3.
FT CHAIN 24 92 BY SIMILARITY.
FT DISULFID 34 57 BY SIMILARITY.
FT DISULFID 35 73 BY SIMILARITY.
FT CONFLICT 22 22 F -> L (IN REF. 3).
FT CONFLICT 62 62 V -> A (IN REF. 3).
SQ SEQUENCE 92 AA; 10345 MW; 8BFF2DE7C6DEDD38 CRC64;

Query Match 29.9%; Score 132; DB 1; Length 92;
Best Local Similarity 36.8%; Pred. NO. 4.2e-09;
Matches 25; Conservative 17; Mismatches 24; Indels 2; Gaps 2;

QY 13 AGPYGANNEDSVCCRDYRRLPLRVVKKHYFTSDSCPRPGVLLTFRDKETCADPRYPW 72
   :||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 23 SAPYGAD-TTPACCFYSR-KIPROFIVDYFETSLCSQPGVIFLTRNRQICADSKETW 80
   :||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:

QY 73 VKMILNKL 80
   I: : I
Db 81 VQEVITDL 88

RESULT 14
ID SY04_HUMAN STANDARD; PRT; 92 AA.
AC P13236; P22617; Q13704.
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
DE protein 1-beta) (MIP-1-beta) (T-cell activation protein 2) (ACT-2)
DE (PAT 744) (H400) (SIS-gamma) (Lymphocyte activation gene-1 protein)
DE (LAG-1) (HC21) (G-26 T lymphocyte-secreted protein).
GN SCY4 OR MIP1B OR LAG1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=89071764; PubMed=2462251;
RA Lipes M.A., Napolitano M., Jeang K.-T., Chang N.T., Leonard W.J.;
RT "Identification, cloning, and characterization of an immune
RT activation gene.";
RL Proc. Natl. Acad. Sci. U.S.A. 85:9704-9708(1988).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=89140347; PubMed=2521882;
RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
RT "Mitogenic activation of human T cells induces two closely related
RT genes which share structural similarities with a new family of
RT secreted factors.";
RL J. Immunol. 142:1582-1590(1989).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=89093958; PubMed=2521353;
RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
RT "A family of small inducible proteins secreted by leukocytes are
RT members of a new superfamily that includes leukocyte and fibroblast-
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RT derived inflammatory agents, growth factors, and indicators of various
RT activation processes.";
RL J. Immunol. 142:679-687(1989).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=91061800; PubMed=2247088;
RA Baixeras E., Roman-Roman S., Jitsukawa S., Genevee C., Mechiche S.,
RA Viegas-Pequignot E., Hercend T., Triebel F.;
RT "Cloning and expression of a lymphocyte activation gene (LAG-1).";
RL Mol. Immunol. 27:11091-1102(1990).
RN [5]
RP SEQUENCE FROM N.A.
RC TISSUE-T-Cell;
RX MEDLINE=89325421; PubMed=2568930;
RA Chang H.C., Reinherz E.L.;
RT "Isolation and characterization of a cDNA encoding a putative
RT cytokine which is induced by stimulation via the CD2 structure on
RT human T lymphocytes.";
RL Eur. J. Immunol. 19:1045-1051(1989).
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=91373378; PubMed=1894635;
RA Napolitano M., Modi W.S., Cevario S.J., Gnarr J.R., Seunanez H.N.,
RA Leonard W.J.;
RT "The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/Tax
RT responsiveness of 5' upstream sequences, and chromosomal
RT localization.";
RL J. Biol. Chem. 266:17531-17536(1991).
RN [7]
RP SEQUENCE FROM N.A.
RA Birren B., Fasman K., McKernan K., Nusbaum C., Richardson P.,
RA Lander E.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE OF 6-92-FROM N.A.
RX MEDLINE=90038522; PubMed=2809212;
RA Miller M.D., Hata S., Waal Malefyt R., Krangel M.S.;
RT "A novel polypeptide secreted by activated human T lymphocytes.";
RL J. Immunol. 143:2907-2916(1989).
RN [9]
RP RECEPTOR INTERACTION.
RX MEDLINE=98180363; PubMed=9521068;
RA Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G.,
RA Weiss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
RA Napolitano M.;
RT "Identification of the CC chemokines TARC and macrophage inflammatory
RT protein-1 beta as novel functional ligands for the CCR8 receptor.";
RL Eur. J. Immunol. 28:582-588(1998).
RN [10]
RP FUNCTION.
RX MEDLINE=96106406; PubMed=8525373;
RA Cocchi F., Devico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
RA Lusso P.;
RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
RT HIV-suppressive factors produced by CD8+ T cells.";
RL Science 270:1811-1815(1995).
RN [11]
RP STRUCTURE BY NMR.
RX MEDLINE=94182137; PubMed=8134838;
RA Lodi P.J., Garrett D.S., Kuscewski J., Tsang M.L.S., Weatherbee J.A.,
RA Leonard W.J., Gronenborn A.M., Clore G.M.;
RT "High-resolution solution structure of the beta chemokine hMIP-1 beta
RT by multidimensional NMR.";
RL Science 263:1762-1767(1994).
CC -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC BINDS TO CCR5 AND TO CCR8. ONE OF THE MAJOR HIV-SUPPRESSIVE
CC FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-BETA INDUCES A
CC DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
CC AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
CC -!- SUBUNIT: HOMODIMER.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- INDUCTION: BY MITOGENS.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
```


Result No.	Query			DB	ID	Description
	Score	Match	Length			
1	315	71.4	81	11	Q9Q2U1	Q9q2ul rattus norv
2	311	70.5	92	11	Q912H5	Q912h5 rattus norv
3	310	70.3	92	11	Q9Q2U2	Q9q2u2 mus musculu
4	158.5	35.9	95	12	Q98158	Q98158 kaposi's sa
5	156	35.4	90	13	Q3PW46	Q3pwa6 gallus gall
6	135	35.1	90	13	Q910C9	Q910c9 gallus gall
7	153	34.7	91	13	Q8Q557	Q8q557 gallus gall
8	152.5	34.6	92	11	Q91210	Q91210 sigmodon hi
9	148	33.6	89	13	Q918E0	Q918e0 gallus gall
10	142	32.2	92	11	Q91265	Q91265 sigmodon hi
11	136	30.8	92	6	Q8SQ40	Q8sq40 felis silve
12	131.5	29.8	91	11	Q912L1	Q912l1 sigmodon hi
13	131	29.7	93	6	Q8SQ46	Q8sq46 bos taurus
14	124	28.1	93	4	Q96168	Q96168 homo sapien
15	123	27.9	99	6	Q95N01	Q95n01 canis famil
16	118	26.8	91	13	Q8Q456	Q8q456 gallus gall

```

Db 61 NRDCADPRMLWVKILHKL 81

RESULT 2
Q912H5 PRELIMINARY; PRT; 92 AA.
AC Q912H5;
DT 01-DEC-2001 (TRENBLrel. 19, Created)
DT 01-DEC-2001 (TRENBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TRENBLrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.

OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
BA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis."; to the EMBL/GenBank/DBJ databases.
RL Submitted (OCT-2001);
DR EMBL; AF432871; AAL30397.1; -
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 70.5%; Score 311; DB 11; Length 92;
Best Local Similarity 66.7%; Pred. NO. 6.7e-34;
Matches 54; Conservative 16; Mismatches 11; Indels 0; Gaps 0;

QY 1 LVLLVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVVKHYFTWSDSCPRGVVLLTFR 60
Db 12 LVLLVALQTSAGPYGANVEDSICCQDYIRHPLPFRVFKYFTWSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPMVKMLNKL 81
Db 72 NRDCADPRMLWVKILHKL 92

RESULT 3
Q90ZU2 PRELIMINARY; PRT; 92 AA.
AC Q90ZU2;
DT 01-MAY-2000 (TRENBLrel. 13, Created)
DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TRENBLrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chantray D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-(1999).
DR EMBL; AF163476; AAD55763.1; -
DR HSP; Q98157; 1C49.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352E63 CRC64;

Query Match 70.3%; Score 310; DB 11; Length 92;
Best Local Similarity 65.4%; Pred. NO. 9.1e-34;
Matches 53; Conservative 18; Mismatches 10; Indels 0; Gaps 0;

QY 1 LVLLVALQATEAGPYGANMEDSVCCRDYVYRLPLRVVVKHYFTWSDSCPRGVVLLTFR 60
Db 12 LVLLVALQTSAGPYGANVEDSICCQDYIRHPLPFRVFKYFTWSDSCPRGVVLLTFR 71
QY 61 DKEICADPRVPMVKMLNKL 81
Db 72 NRDCADPRVPMVKMLNKL 92

RESULT 4
Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; O12569;
DT 01-FEB-1997 (TRENBLrel. 02, Created)
DT 01-JUL-1997 (TRENBLrel. 04, Last sequence update)
DT 01-JUN-2001 (TRENBLrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.";
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Feruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
RT (HHV8).";
RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
RN [3]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Feruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo D.,
RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Feruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (MAR-1997) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=97296220; PubMed=9151804;
RA Neipel F., Albrecht J.C., Fleckenstein B.;
RT "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
RT human herpesvirus 8: determinants of its pathogenicity?";
RN J. Virol. 71:4187-4192(1997).
RN [7]
RP SEQUENCE FROM N.A.
RA Sun R., Lin S.-F., Miller G.;
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A.
RA Ren S., Lin S.-F., Miller G.;
RL Submitted (FEB-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; U75698; AAC57095.1; -
DR EMBL; U74585; AAB61704.1; -
DR EMBL; U93872; AAB62671.1; -

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[illegible]

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DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match 34.6%; Score 152.5; DB 11; Length 92;
Best Local Similarity 41.2%; Pred. No. 1.2e-12;
Matches 33; Conservative 10; Mismatches 36; Indels 1; Gaps 1;

QY 1 LVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 60
DB 11 LLLLAECAPVTSAPRGSDPPIS-CFESYASRKLPRNFVTDYETSSILCSKPAVVLTFR 69
QY 61 DKEICADPRVPVWVKMLNKL 80
DB 70 GKEVCADPSQPVWNEYVNDL 89

RESULT 9
QY18E0 Q918E0 PRELIMINARY; PRT; 89 AA.
AC Q918E0;
DT 01-OCT-2000 (Tremblrel. 15, Created)
DT 01-OCT-2000 (Tremblrel. 15, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE Chemokine K203 precursor.
GN K203.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=20170941; PubMed=10704244;
RA Sick C., Schneider K., Staeheli P., Weining K.C.;
RT "Novel chicken CXCL2 and CXCL12 chemokines.";
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -.
DR HSP; P13236; IHUM.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW SIGNAL.
FT CHAIN 1 21 POTENTIAL.
FT CHAIN 22 89 CHEMOKINE_K203.
SQ SEQUENCE 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;

Query Match 33.6%; Score 148; DB 13; Length 89;
Best Local Similarity 28.4%; Pred. No. 4.7e-12;
Matches 23; Conservative 24; Mismatches 33; Indels 2; Gaps 1;

QY 2 VLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 61
DB 10 LLIASFCSSAPPVGPV--PTCCTTYITHKIPNLRIQRYSTSCSKPAIIFTKKE 67
QY 62 KEICADPRVPVWVKMLNKL 82
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Db 68 REVCANPSDEPWQRYQYLSVKR 88

RESULT 10
QY1265 Q91265 PRELIMINARY; PRT; 92 AA.
AC Q91265;
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIP1 ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY059407; AAL26704.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;

Query Match 32.2%; Score 142; DB 11; Length 92;
Best Local Similarity 34.6%; Pred. No. 3.1e-11;
Matches 28; Conservative 19; Mismatches 30; Indels 4; Gaps 3;

QY 2 VLLAVALQATE--AGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 59
DB 10 VLLCIITLCNQVFSAPYAGD-TPTFCFCFSYGR-QIPRKFIADYFQTSSLCSEPGIIFLTK 67
QY 60 RDEICADPRVPVWVKMLNKL 80
DB 68 RNRHVCADPKETWVQEIITDL 88

RESULT 11
QY8Q40 Q8SQ40 PRELIMINARY; PRT; 92 AA.
AC Q8SQ40;
DT 01-JUN-2002 (Tremblrel. 21, Created)
DT 01-JUN-2002 (Tremblrel. 21, Last sequence update)
DT 01-JUN-2002 (Tremblrel. 21, Last annotation update)
DE RANTES protein.
GN RANTES.
OS Felis silvestris catus (Cat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Felidae; Felis.
OX NCBI_TaxID=9685;
RN [1]
RP SEQUENCE FROM N.A.
RA Kimura T., Kano R., Hasegawa A.;
RT "Molecular cloning of feline RANTES gene.";
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB083479; BAB88940.1; -.
SQ SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;

Query Match 30.8%; Score 136; DB 6; Length 92;
Best Local Similarity 36.0%; Pred. No. 2e-10;
Matches 27; Conservative 17; Mismatches 27; Indels 4; Gaps 2;

QY 2 VLLAVALQAT--EAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDCPRPGVLLTFR 59
DB 10 VLLTAATAFCTPASAPYAS--DTTPCCFAYLPLHLPLHLQEIYFYTSSKSPAVVVFVTR 67
QY 60 RDEICADPRVPVWVK 74
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Db 68 RKRQVCANPQKKWVR 82

RESULT 12

Q912L1 ID Q912L1 PRELIMINARY; PRT; 91 AA.
AC Q912L1
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE RANTES chemokine.
OS Sigmmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RL "Sigmmodon hispidus cytokines, chemokines and interferons.";
EMBL: AF421391; AAL16932.1;
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 91 AA; 10082 MW; D0D6EAEABE4242FF CRC64;

Query Match 29.8%; Score 131.5; DB 11; Length 91;
Best Local Similarity 36.6%; Pred. No. 7.8e-10;
Matches 30; Conservative 19; Mismatches 28; Indels 5; Gaps 3;
Qy 1 LVLLAVALQA-TEAGPYGANNEDSV-CCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVVLTT 58
Db 10 VLMASLCPASAPNGS---DTIPCCFAYLSAVLPRAHVKEFYFTSSKCSNFVVFVT 66
Qy 59 FRKEICADRPVPVVKMLNKL 80
Db 67 RNRQVCANPKKKWQVEYINYL 88

RESULT 13

Q8SQA6 ID Q8SQA6 PRELIMINARY; PRT; 93 AA.
AC Q8SQA6;
DT 01-JUN-2002 (Tremblrel. 21, Created)
DT 01-JUN-2002 (Tremblrel. 21, Last sequence update)
DT 01-JUN-2002 (Tremblrel. 21, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RA Werling D.;
RL "Role of chemokines in RSV infection.";
Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY07840; AAL78060.1;
SQ SEQUENCE 93 AA; 10118 MW; 1266BFBFCE5E8E9 CRC64;

Query Match 29.7%; Score 131; DB 6; Length 93;
Best Local Similarity 32.1%; Pred. No. 9.3e-10;
Matches 26; Conservative 21; Mismatches 32; Indels 2; Gaps 2;
Qy 1 LVLLAVAL-QATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVVLTT 59
Db 10 VLLCAMLCSQVFSAPPGAD-TPTACCFSVARQLSRKIADVFEFTSSQCSKPGVIFQTK 68

Qy 60 RDEICADRPVPVVKMLNKL 80
Db 69 KGRQVCANPTEDWQVEYITDL 89

RESULT 14

Q96I68 ID Q96I68 PRELIMINARY; PRT; 93 AA.
AC Q96I68;
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Similar to small inducible cytokine A3 (homologous to mouse Mip-1a).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=B-CELL;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC007783; AAH07783.1;
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;

Query Match 28.1%; Score 124; DB 4; Length 93;
Best Local Similarity 31.2%; Pred. No. 8.1e-09;
Matches 25; Conservative 17; Mismatches 36; Indels 2; Gaps 2;
Qy 1 LVLLAVALQA-TEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVVLTTFR 60
Db 12 LCTMALCNQVLSA-PLAAD-TPTACCFSYTSRIPQNFINDYFETSSQCSKPSVIFLTR 69
Qy 61 DKEICADRPVPVVKMLNKL 80
Db 70 GRCVADPSEEWQVYVSD 89

RESULT 15

Q95N01 ID Q95N01 PRELIMINARY; PRT; 99 AA.
AC Q95N01;
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-MAR-2002 (Tremblrel. 20, Last annotation update)
DE Chemokine.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RA Maeda S., Mizuno T., Yamashita K., Kurata K., Masuda K., Ohno K.,
RA Tsujimoto H.;
RL "Molecular Cloning of Canine Thymus and Activation-Regulated Chemokine (TARC) Gene and its Expression in Various Tissues.";
J. Vet. Med. Sci. 0:0-0(2001).
DR EMBL: AB054642; BAB62131.1;
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 99 AA; 11052 MW; 6BA28EDDF857BE81 CRC64;

Query Match 27.9%; Score 123; DB 6; Length 99;
Best Local Similarity 33.3%; Pred. No. 1.2e-08;
Matches 27; Conservative 17; Mismatches 35; Indels 2; Gaps 2;
Qy 2 VLLAVALQA-TEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVVLTTFRD 61
Db 12 LLLGASLQVTHAA-RGTNV-GRECCLEYFKGAIPISRLTRWKTSGECPKDAIVFVTVQG 69

QY 62 KEICADPRVPWVKMILNKLQ 82
| | | | | :
Db 70 KSICSDPKDKVKKAVRYLQ 90

Search completed: July 28, 2003, 04:02:51
Job time : 15.1597 secs

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 20.3193 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
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Scoring table: BLOSUM62
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Searched: 908470 seqs, 133250620 residues
Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Result No.	Score	Query Match	Length DB ID	Description
1	446	97.4	93 18 AAW20059	Human macrophage d
2	446	97.4	93 20 AAY24417	Macrophage derived
3	446	97.4	93 20 AAY05872	Human macrophage-d
4	445	97.2	93 18 AAW20058	Macrophage derived
5	445	97.2	93 19 AAW62783	Amino acid sequenc
6	445	97.2	93 19 AAW59433	Human chemokine pr
7	445	97.2	93 19 AAW40811	Macrophage-derived
8	445	97.2	93 20 AAY26175	Macrophage-derived
9	445	97.2	93 20 AAY24414	Human macrophage d
10	445	97.2	93 20 AAY05871	Human macrophage-d

SUMMARIES

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

11	445	97.2	93 20 AAY06829	Macrophage derived
12	445	97.2	93 21 AAB07500	A human monokine d
13	445	97.2	93 23 AAO14046	Human macrophage-d
14	440	96.1	93 18 AAW07604	Cytokine beta-13 s
15	440	96.1	93 19 AAW57881	Human chemokine be
16	440	96.1	93 22 AAB68352	Amino acid sequenc
17	436	95.2	93 20 AAY05879	Human macrophage-d
18	419	91.5	93 20 AAY05880	Macaque macrophage
19	413	90.2	85 19 AAW59432	Human chemokine pr
20	343	74.9	69 18 AAW20061	Human macrophage d
21	343	74.9	69 20 AAY24415	Macrophage derived
22	343	74.9	69 20 AAY05874	Human macrophage-d
23	342	74.7	69 23 AAO20022	Human chemokine MD
24	342	74.7	69 23 AAO14155	Human MDC protein.
25	342	74.7	70 18 AAW20060	Human macrophage d
26	342	74.7	70 20 AAY24413	Macrophage derived
27	342	74.7	70 20 AAY05873	Human macrophage-d
28	342	74.7	154 20 AAY05878	Yeast pre-pro-alpha
29	342	74.7	172 20 AAY29895	Human MDC and huma
30	342	74.7	334 20 AAY29904	Human MDC and huma
31	342	74.7	587 20 AAY29900	Human MDC and HIV-
32	336	73.4	68 18 AAW17668	Stem cell mobilisi
33	322	70.3	69 18 AAW20062	Human macrophage d
34	322	70.3	69 20 AAY24416	Macrophage derived
35	322	70.3	69 20 AAY05875	Human macrophage-d
36	299	65.3	473 22 AAB61797	Chimeric chemokine
37	297	64.8	92 19 AAW59434	Mouse chemokine pr
38	295	64.4	92 20 AAY05876	Mouse macrophage-d
39	268	58.5	81 20 AAY05877	Rat macrophage-der
40	231	50.4	68 22 AAB61808	Murine MDC mature
41	231	50.4	68 23 AAG78392	Mouse chemokine mM
42	231	50.4	68 23 AAG68355	Murine chemokine m
43	193	42.1	37 22 ABB39053	Peptide #6559 enco
44	193	42.1	37 22 AAW59705	Human brain expres
45	193	42.1	37 22 AAW72285	Human bone marrow

ALIGNMENTS

RESULT 1			
AAW20059 standard; Protein; 93 AA.			
ID	AAW20059	standard; Protein; 93 AA.	
XX			
AC	AAW20059;		
XX			
DT	11-SEP-1997	(first entry)	
XX			
DE	Human macrophage derived chemokine analogue.		
XX			
KW	MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;		
KW	rheumatoid arthritis; chemotaxis; fibroblast proliferation;		
KW	wound healing; angiogenesis; inflammation.		
XX			
OS	Synthetic.		
XX			
PH	Key	Location/Qualifiers	
FT	Misc-difference 48	/label= Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser,	
FT		Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,	
FT		Cys, Met	
FT	Misc-difference 51	/label= Lys, Gly, Ala, Val, Leu, Ile, Pro, Ser,	
FT		Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,	
FT		Cys, Met	
FT	Misc-difference 54	/label= Tyr, Ser, Lys, Arg, His, Asp, Glu, Asn,	
FT		Gln, Cys	
FT	Misc-difference 74	/label= Glu, Lys, Arg, His, Gly, Ala	
FT	Misc-difference 83	/label= Trp, Ser, Lys, Arg, His, Asp, Glu, Asn,	
FT		Gln, Cys	

FT Misc-difference 84
 FT /label= Val, Ser, Lys, Arg, His, Asp, Glu, Asn,
 FT Gln, Cys
 PN W09640923-A1.
 XX 19-DEC-1996.
 XX 07-JUN-1996; 96WO-US10114.
 XX 16-NOV-1995; 95US-0558658.
 PR 07-JUN-1995; 95US-0479620.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR
 XX Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 9; Page 82; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 97.4%; Score 446; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.7e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXXHFXWTSDC 60
 Db 1 MARLQTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXXHFXWTSDC 60
 QY 61 PRPGVLLTFRDXXICADPRVPXXKMLNKLKLSQ 93
 Db 61 PRPGVLLTFRDXXICADPRVPXXKMLNKLKLSQ 93
 RESULT 2
 AAY24417
 ID AAY24417 standard; peptide; 93 AA.
 AC
 XX
 XX AAY24417;
 XX
 XX 24-SEP-1999 (first entry)
 XX
 DE Macrophage derived chemokine analogue general formula.
 XX
 XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Misc-difference 48
 FT /label= Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr,

FT Misc-difference 51
 FT Phe, Tyr, Trp, Asp, Glu, Asn, Gln, Cys, Met
 FT /label= Lys, Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr,
 FT Phe, Tyr, Trp, Asp, Glu, Asn, Gln, Cys, Met
 FT Misc-difference 54
 FT /label= Arg, Ser, Lys, Tyr, His, Asp, Glu, Asn, Gln, Cys
 FT Misc-difference 74
 FT /label= Arg, Gly, Ala, Lys, His, Glu
 FT Misc-difference 83
 FT /label= Arg, Lys, Ser, His, Trp, Asp, Glu, Asn, Gln, Cys
 FT Misc-difference 84
 FT /label= Arg, Lys, Val, Ser, His, Asp, Glu, Asn, Gln, Cys
 XX
 XX US5932703-A.
 XX
 XX 03-AUG-1999.
 XX
 XX 07-JUN-1996; 96US-0660542.
 XX
 XX 07-JUN-1996; 96US-0660542.
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX
 XX (ICOS-) ICOS CORP.
 XX
 XX Godiska R, Gray PW;
 XX WPI; 1999-443621/37.
 DR
 XX Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 XX
 XX Example 11; Column 25-27; 43pp; English.
 XX
 CC The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. MDC analogues are capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogues may be used to modulate
 CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX
 SQ Sequence 93 AA;
 Query Match 97.4%; Score 446; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.7e-51;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MARLQTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXXHFXWTSDC 60
 Db 1 MARLQTALLVLLVLLVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXXHFXWTSDC 60
 QY 61 PRPGVLLTFRDXXICADPRVPXXKMLNKLKLSQ 93
 Db 61 PRPGVLLTFRDXXICADPRVPXXKMLNKLKLSQ 93
 RESULT 3
 AAY05872
 ID AAY05872 standard; Protein; 93 AA.
 AC
 XX AAY05872;
 XX
 XX 02-AUG-1999 (first entry)
 XX
 DE Human macrophage-derived C-C chemokine MDC analogue.
 XX
 KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.

XX OS Homo sapiens.
XX OS Synthetic.
XX FH Location/Qualifiers
XX FT 1..24
XX FT /note= "signal peptide"
XX FT Protein 25..93
XX FT /note= "mature protein"
XX FT Misc-difference 48
XX FT /label= Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser,
XX FT Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,
XX FT Cys, Met
XX FT Misc-difference 51
XX FT /label= Lys, Gly, Ala, Val, Leu, Ile, Pro, Ser,
XX FT Thr, Phe, Tyr, Trp, Asp, Glu, Asn, Gln,
XX FT Cys, Met
XX FT Misc-difference 54
XX FT /label= Tyr, Ser, Lys, Arg, His, Asp, Glu, Asn,
XX FT Gln, Cys
XX FT Misc-difference 74
XX FT /label= Glu, Lys, Arg, His, Gly, Ala
XX FT Misc-difference 83
XX FT /label= Trp, Ser, Lys, Arg, His, Asp, Glu, Asn,
XX FT Gln, Cys
XX FT Misc-difference 84
XX FT /label= Val, Ser, Lys, Arg, His, Asp, Glu, Asn,
XX FT Gln, Cys
XX PN WO9915666-A2.
XX XX 01-APR-1999.
XX XX 28-SEP-1998; 98WO-US20270.
XX XX 28-APR-1998; 98US-0067447.
XX XX 26-SEP-1997; 97US-0939107.
XX XX (ICOS-) ICOS CORP.
XX XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
XX WPI; 1999-254715/21.
XX XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists
XX PS Example 11; Page 59; 147pp; English.
XX XX The present sequence represents synthetic analogues of the novel
XX CC human macrophage derived C-C chemokine MDC that contain amino acid
XX CC alterations compared with native MDC (see AAY05871). Such MDC
XX CC polypeptide analogues are specifically contemplated to modulate
XX CC the binding characteristics of MDC to chemokine receptors and/or
XX CC other molecules that are considered to be important in presenting
XX CC MDC to its receptor. The MDC antagonists are used in claimed
XX CC methods for the preparation of medicaments for the suppression of
XX CC the proliferation of a mammalian immunodeficiency virus, for
XX CC inhibiting platelet aggregation in a mammal, for the treatment or
XX CC palliation of lupus erythematosus in a mammal, for inhibiting
XX CC MDC-induced activation, chemotaxis or proliferation of cells that
XX CC express CCR4, for inhibiting or palliating an allergic reaction in
XX CC a mammal, and for treating asthma.
XX XX Sequence 93 AA;
XX XX Query Match 97.4%; Score 446; DB 20; Length 93;
XX XX Best Local Similarity 100.0%; Pred. No. 2.7e-51;
XX XX Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARLQALLVLLVLLVAVALQATAGPYGANMEDSVCCRDYVRLPLXVYVXHFWTSDSC 60
DB 1 MARLQALLVLLVLLVAVALQATAGPYGANMEDSVCCRDYVRLPLXVYVXHFWTSDSC 60

QY 61 PRGVVLLTFRDKKXICADPRVPXXKMLNKLQSQ 93
DB 61 PRGVVLLTFRDKKXICADPRVPXXKMLNKLQSQ 93
RESULT 4
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX AC AAW20058;
XX DT 11-SEP-1997 (first entry)
XX DE Macrophage derived chemokine for treating inflammation.
XX KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
XX KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
XX KW wound healing; angiogenesis; inflammation.
XX OS Homo sapiens.
XX FH Location/Qualifiers
XX FT 1..24
XX FT /label= sig_peptide
XX FT Protein 25..93
XX FT /label= mat_protein
XX PN WO9640923-A1.
XX XX 19-DEC-1996.
XX XX 07-JUN-1996; 96WO-US10114.
XX XX 16-NOV-1995; 95US-0558658.
XX XX 07-JUN-1995; 95US-0479620.
XX XX (ICOS-) ICOS CORP.
XX XX Godiska R, Gray PW;
XX XX WPI; 1997-052324/05.
XX XX N-PSDB; AAT76529.
XX XX Macrophage derived chemokine (MDC) and analogues - used in the
XX XX treatment of inflammatory diseases, MDC antibodies used to treat
XX XX Crohn's disease, rheumatoid arthritis, etc.
XX PS Claim 1; Page 73; 106pp; English.
XX XX A new macrophage derived chemokine, MDC, a member of the C-C
XX CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
XX CC analogues may be used in the treatment of inflammatory diseases
XX CC especially diseases characterised by monocyte chemotaxis towards a
XX CC site of inflammation. MDC and its analogues also induce fibroblast
XX CC proliferation having a positive effect in wound healing and
XX CC angiogenesis. They may prove to be clinically important in the
XX CC treatment of tumours, by directly or indirectly inhibiting tumour
XX CC formation. Antibodies directed against MDC and its analogues may be
XX CC used in the treatment of Crohn's disease, rheumatoid arthritis and
XX CC atherosclerosis. Probes and/or primers for the identification of MDC
XX CC encoding sequences can be derived from MDC encoding sequences.
XX XX Sequence 93 AA;
XX XX Query Match 97.2%; Score 445; DB 18; Length 93;
XX XX Best Local Similarity 93.5%; Pred. No. 3.7e-51;
XX XX Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 1 MARLQALLVLLVLLVAVALQATAGPYGANMEDSVCCRDYVRLPLXVYVXHFWTSDSC 60
DB 1 MARLQALLVLLVLLVAVALQATAGPYGANMEDSVCCRDYVRLPLXVYVXHFWTSDSC 60
QY 61 PRGVVLLTFRDKKXICADPRVPXXKMLNKLQSQ 93

Db 61 PRPGVLLTFRDKETICADPRVPVWVKMILNKLQ 93

RESULT 5

AAW62783
ID AAW62783 standard; Protein: 93 AA.

AC AAW62783;

DT 24-SEP-1998 (first entry)

DE Amino acid sequence of human STCP-1.

KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
KW joint inflammation; rheumatoid arthritis; lupus.

OS Homo sapiens.

PN WO9824907-A1.

PD 11-JUN-1998.

PF 26-NOV-1997; 97WO-US21552.

PR 03-DEC-1996; 96US-0760127.

PA (AMGE-) AMGEN INC.

PI Andrew DP, Chang M;

DR WPI; 1998-333326/29.

DR N-PSDB; AAV38933.

XX Human STCP-1 polypeptides with chemokine activity - useful e.g. to
PT treat HIV infection or other viral or bacterial pathogens infecting
PT T-cells, macrophages or other immune system cells

PS Claim 1; Fig 2A-F; 96pp; English.

XX The present sequence represents human STCP-1. STCP-1 polypeptides
CC demonstrate chemokine activity for T-cells. The polypeptides are useful
CC prophylactically or therapeutically to treat HIV infection and other
CC conditions associated with viral/bacterial pathogens infecting T-cells,
CC macrophages or other immune system cells. They can be included
CC (optionally chemically modified) with a pharmaceutically acceptable
CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
CC in therapeutic compositions for treating these conditions. STCP-1 also
CC useful to assay for inhibitory compounds used to reduce circulatory
CC system STCP-1 levels to alleviate e.g. joint inflammation associated
CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
CC polypeptides are also useful to prepare antibodies or hybridomas. The
CC nucleic acids are useful to produce hybridisation probes to test for
XX STCP-1 DNA/RNA in mammalian samples.

SQ Sequence 93 AA;

Query Match 97.2%; Score 445; DB 19; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSC 60

Db 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93

Db 61 PRPGVLLTFRDKETICADPRVPVWVKMILNKLQ 93

RESULT 6

AAW59433

ID AAW59433 standard; Protein: 93 AA.

AC AAW59433;

DT 27-AUG-1998 (first entry)

DE Human chemokine protein 331D5.

KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
KW degenerative condition; abnormal proliferation; regeneration;
KW degeneration; atrophy.

OS Homo sapiens.

PN WO9811226-A2.

PD 19-MAR-1998.

PF 09-SEP-1997; 97WO-US15315.

PR 10-SEP-1996; 96US-0025724.

PA (SCHE) SCHERING CORP.

PI Gorman DM, Hedrick JA, Zlotnik A;

DR WPI; 1998-207387/18.

DR N-PSDB; AAV34997.

XX Mammalian CC and CXCL chemokines - useful for treatment of, e.g.
PT cancer and degenerative conditions
PT Claim 1; Page 78; 82pp; English.

XX This sequence represents a novel human chemokine protein, 331D5.
CC Nucleic acid sequences encoding the chemokines can be used for detection,
CC in e.g. forensic techniques. Antibodies and other binding agents may be
CC used in diagnostics. The chemokines themselves are useful for treatment
CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
CC regeneration, degeneration or atrophy may be treated by the inventive
CC compositions.

SQ Sequence 93 AA;

Query Match 97.2%; Score 445; DB 19; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSC 60

Db 1 MARLQATLLVVLVLLAVLALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXHFXTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93

Db 61 PRPGVLLTFRDKETICADPRVPVWVKMILNKLQ 93

RESULT 7

AAW40811

ID AAW40811 standard; Protein: 93 AA.

AC AAW40811;

DT 01-APR-1998 (first entry)

DE Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
 KW arthritis; inflammatory disorder; cancer; Crohn's disease;
 KW atherosclerosis.
 XX Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Peptide 1..24
 FT /note= "leader peptide"
 FT Protein 25..93
 FT /note= "mature protein"
 XX
 XX US5688927-A.
 PN
 XX 18-NOV-1997.
 PD
 XX 07-JUN-1995; 95US-0480449.
 PF
 XX 07-JUN-1995; 95US-0480449.
 PR
 XX (ICOS-) ICOS CORP.
 PA
 XX Godiska R, Gray PW;
 PI
 XX WPI; 1998-008038/01.
 DR N-PSDB; AAT99233.
 DR
 XX Antibodies specific for macrophage-derived chemokine - useful for
 PT purifying or detecting the chemokine or modulating its activity
 PT
 XX Claim 3; Column 21-24; 22pp; English.
 PS
 XX This sequence represents the macrophage-derived chemokine (MDC). This
 CC protein is used to produce the antibodies of the invention. The
 CC antibodies are useful for purifying MDC polypeptides, for detecting
 CC endogenous MDC in a host, and for modulating binding of MDC to its
 CC receptors. The DNA encoding this sequence can be used for identifying and
 CC isolating non-human MDC homologues. The MDC protein is potentially useful
 CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
 CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.
 XX
 XX SQ Sequence 93 AA;
 Query Match 97.2%; Score 445; DB 19; Length 93;
 Best Local Similarity 93.5%; Pred. No. 3.7e-51;
 Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXHFXTSDSC 60
 DB 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVPXXKMILNLSQ 93
 DB 61 PRPGVLLTFRDKXICADPRVPVWKMLNLSQ 93
 RESULT 8
 AAY26175
 ID AAY26175 standard; Protein; 93 AA.
 XX
 XX AAY26175;
 AC
 XX 29-SEP-1999 (first entry)
 DT
 XX Macrophage-derived chemokine.
 DE
 XX Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
 KW humoral response; cell-mediated response; PCR; immunostimulatory;
 KW expression plasmid vector.
 XX
 XX Homo sapiens.
 OS
 XX

FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /note= "signal peptide"
 FT Protein 25..93
 FT /note= "mature macrophage-derived chemokine"
 XX
 XX WO9929728-A1.
 PN
 XX 17-JUN-1999.
 PD
 XX 11-DEC-1998; 98WO-US26291.
 PF
 XX 11-DEC-1997; 97US-0069281.
 PR
 XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
 PA
 XX Devico AL, Gallo RC, Garzino-Demo A;
 PI
 XX WPI; 1999-385578/32.
 DR N-PSDB; AAX80630.
 DR
 XX Methods of enhancing vaccine efficacy
 PT
 XX Claim 6; Fig 1A(1)-1A(2); 134pp; English.
 PS
 XX The present sequence is macrophage-derived chemokine. This belongs to
 CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
 CC combining it with one or more chemokines to enhance the immune response
 CC to an antigen. This can be humoral or cell-mediated immune response. The
 CC purified chemokines, fragments, derivatives or analogues are
 CC administered either concurrently with one or more purified antigens
 CC against which an immune response is desired or within a time period
 CC either before or after antigen administration. The chemokine gene is
 CC isolated by PCR, and administered by constructing an expression plasmid
 CC vector which can be expressed in a coordinated manner upon introduction
 CC in a suitable cell. The vaccines are immunostimulatory and can be used
 CC to treat microbial diseases especially HIV.
 XX
 XX SQ Sequence 93 AA;
 Query Match 97.2%; Score 445; DB 20; Length 93;
 Best Local Similarity 93.5%; Pred. No. 3.7e-51;
 Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXHFXTSDSC 60
 DB 1 MARLOTALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVPXXKMILNLSQ 93
 DB 61 PRPGVLLTFRDKXICADPRVPVWKMLNLSQ 93
 RESULT 9
 AAY24414
 ID AAY24414 standard; Protein; 93 AA.
 XX
 XX AAY24414;
 AC
 XX 24-SEP-1999 (first entry)
 DT
 XX Human macrophage derived chemokine.
 DE
 XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FH Peptide 1..24
 FT /label= signal
 FT Protein 25..93

FT XX for in claim 19"

PN XX WO9914237-A1.

XX XX 25-MAR-1999.

PD XX

XX XX 16-SEP-1998; 98WO-US19450.

XX XX 16-SEP-1997; 97US-0931764.

XX XX (ALKU) AKZO NOBEL NV.

XX XX

XX XX Devico AL, Gallo RC, Garzino-Demo A, Markham PD;

PI Pal R;

XX XX

XX XX WPI: 1999-244024/20.

DR N-PSDB; AAX32817.

XX XX

XX XX Treatment or prevention of lentivirus, particularly HIV infection

XX XX

PS Claim 16; Page 97-98; 103pp; English.

XX XX

CC This represents a human macrophage derived chemokine (MDC). The

CC invention provides a novel method of treating or preventing lentivirus

CC (LV) infection or replication in a human subject, that comprises

CC administering to the subject a composition comprising MDC or a derivative

CC of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The

CC products can be used for treating or preventing LV infection or

CC replication, particularly HIV infection or replication. The products can

CC also be used for the prognosis for a LV infection, particularly an HIV

CC infection using the MDC as a prognostic indicator. The methods can also

CC be used with other LVs, e.g. simian immunodeficiency virus, feline

CC immunodeficiency virus and bovine immunodeficiency virus.

XX XX

XX Sequence 93 AA;

Query Match 97.2%; Score 445; DB 20; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

Db 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKKICADPRVPVXXKMLNKLQS 93

Db 61 PRPGVLLTFRDKKICADPRVPVXXKMLNKLQS 93

RESULT 12

AAB07500

ID AAB07500 standard; Protein; 93 AA.

XX AC AAB07500;

XX XX

DT 20-OCT-2000 (first entry)

XX XX

DE A human monokine derived chemokine.

XX XX

KW Systemic memory T cell; CCR4; TARC; integrin dependent arrest;

KW thymus and activation-regulated chemokine; vascular receptor;

KW MDC; monokine derived chemokine; adhesion trigger; inflammation.

XX OS Homo sapiens.

XX XX

PN WO200041724-A1.

XX XX

PD 20-JUL-2000.

XX XX

PF 14-JAN-2000; 2000WO-US00953.

XX XX

PR 15-JAN-1999; 99US-0232878.

XX XX

PA (STRD) UNIV LELAND STANFORD JUNIOR.

PA (LEUK-) LEUKOSITE INC.

XX XX

PI Butcher EC, Campbell JJ, Wu L, Rottman JB;

XX XX

DR WPI: 2000-475957/41.

DR N-PSDB; AAA58874.

XX XX

PT Modulating the trafficking of systemic memory T cells in mammals by

PT administering a CCR4 modulating agent, useful for the treatment of

PT inflammation

XX XX

XX PS Disclosure; Page 38; 39pp; English.

XX XX

CC The specification describes a method of modulating the trafficking of

CC systemic memory T cells in a mammalian host. The method comprises

CC administering a CCR4 modulating agent. It has been found that systemic

CC T cells such as express high levels of CCR4. Ligands of CCR4 such as

CC TARC (thymus and activation-regulated chemokine) and MDC (monokine

CC derived chemokine) act as an adhesion trigger and, upon CCR4 binding,

CC these cells undergo integrin dependent arrest to the appropriate

CC vascular receptors. This arrest acts to localize the cells at the

CC target site. The method modulates this triggering and CCR4 mediated

CC chemotaxis to affect the localization of T cells in targeted tissues.

CC The active agent may be a CCR4 agonist that acts to enhance T cell

CC localization. Alternatively, it may be an antagonist that blocks CCR4

CC biological activity. A CCR4 antagonist may be administered for the

CC treatment of inflammation. The present sequence represents a human MDC.

XX XX

XX Sequence 93 AA;

Query Match 97.2%; Score 445; DB 21; Length 93;

Best Local Similarity 93.5%; Pred. No. 3.7e-51;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

Db 1 MARLQALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKKICADPRVPVXXKMLNKLQS 93

Db 61 PRPGVLLTFRDKKICADPRVPVXXKMLNKLQS 93

RESULT 13

AAO14046

ID AAO14046 standard; Protein; 93 AA.

XX AC AAO14046;

XX XX

DT 08-MAY-2002 (first entry)

XX XX

DE Human macrophage-derived C-C chemokine (MDC).

XX XX

KW Human; macrophage-derived C-C chemokine; MDC; immune system;

KW leukocyte; monocyte; calcium flux; chemotaxis; medical imaging;

KW infection; inflammation; macrophage; Crohn's disease;

KW rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;

KW chemotherapy; radiation therapy; tumour.

XX OS Homo sapiens.

XX XX

PH Key Location/Qualifiers

FT Peptide 1..24

FT /note= "Signal peptide"

FT Protein 25..93

FT /note= "Mature macrophage-derived C-C chemokine, this is

FT a specifically claimed region"

FT Misc-difference 25..39

FT /note= "Specifically claimed region"

XX XX

XX PN US6320023-B1.

XX XX

PD 20-NOV-2001.
 XX 07-JUN-1995; 95US-0479603.
 XX 07-JUN-1995; 95US-0479603.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 2002-074410/10.
 DR N-PSDB; AAK98372.
 XX
 XX Macrophage derived C-C chemokines useful in medical imaging and for the
 XX development of agents for controlling inflammation
 XX
 XX Claim 1; Fig 1; 22pp; English.
 XX
 XX The present sequence represents a novel human macrophage-derived C-C
 XX chemokine (MDC) of the invention. Chemokines comprise a family of small
 XX secreted proteins which attract and activate leukocytes, thereby aiding
 XX in the stimulation and regulation of the immune system. C-C cytokines are
 XX a subfamily known to activate monocytes, causing calcium flux and
 XX chemotaxis. The invention comprises a novel human MDC protein and nucleic
 XX acids, as well as methods for the production of the MDC protein. The MDC
 XX of the invention is useful in medical imaging (e.g. for imaging sites of
 XX infection, inflammation, and other sites having C-C chemokine receptor
 XX molecules. Inhibition of MDC is believed to be useful in treating
 XX diseases involving macrophages (e.g. Crohn's disease, rheumatoid
 XX arthritis or atherosclerosis). Alternatively, augmenting the effects of
 XX MDC is believed to be beneficial towards wound healing and angiogenesis.
 XX Also MDC or MDC agonists may be beneficial to patients receiving
 XX chemotherapy or radiation therapy and in the treatment of tumours.
 XX
 XX Sequence 93 AA;
 XX
 XX Query Match 97.2%; Score 445; DB 23; Length 93;
 XX Best Local Similarity 93.5%; Pred. No. 3.7e-51;
 XX Matches 87; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 MARLQALLVLLVLLVAVALQATGAGPYGANNEDSVCCRDYVRLPLXVXHXFWTSDSC 60
 DB 1 MARLQALLVLLVLLVAVALQATGAGPYGANNEDSVCCRDYVRLPLXVXHXFWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 DB 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 RESULT 14
 .AAW07604
 ID AAW07604 standard; Protein; 93 AA.
 XX
 XX AAW07604;
 XX
 XX 03-SEP-1997 (first entry)
 XX
 XX Cytokine beta-13 stimulates migration/activation of immune cells.
 XX
 XX Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
 XX defence; activation; eosinophil; monocyte; macrophage; T lymphocyte;
 XX T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection;
 XX Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis;
 XX leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
 XX rheumatoid arthritis; silicosis.
 XX
 XX Homo sapiens.
 XX
 XX Key Location/Qualifiers
 XX Misc-difference 45 /note= "given as encoded by CAC codon in AAT44026"
 XX
 XX W09639521-A1.

XX 12-DEC-1996.
 XX 06-JUN-1995; 95WO-US07294.
 XX 06-JUN-1995; 95WO-US07294.
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX (SMIK) SMITHKLINE BEECHAM CORP.
 XX Li H, Seibel G;
 XX WPI; 1997-043143/04.
 DR N-PSDB; AAT44026.
 XX
 XX Human chemokine beta-13 - useful for treating solid tumours,
 XX leukaemia, infections, autoimmune disease, fibrotic disorders,
 XX psoriasis, etc.
 XX
 XX Claim 10; Page 46; 58pp; English.
 XX
 XX AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
 XX C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for
 XX treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13
 XX stimulates the invasion and activation of host defence cells making it
 XX useful for treating solid tumours, e.g. Kaposi's sarcoma, and for
 XX enhancing resistance to acute and chronic infections, e.g. mycobacterial
 XX infections. The chemokine induces chemotactic migration of monocytes,
 XX neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to
 XX sites where they are needed. Eosinophils may be attracted to the site
 XX of a parasitic infection to kill parasite larvae. Ck-beta-13 also
 XX recruits debris-clearing and connective tissue promoting inflammatory
 XX cells, and is therefore used to stimulate wound healing, prevent
 XX scarring and treat liver cirrhosis, osteoarthritis and pulmonary
 XX fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
 XX mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and
 XX to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
 XX chemokine which is useful for treating certain autoimmune diseases,
 XX atherosclerosis, chronic inflammatory and infective diseases, allergic
 XX reactions, rheumatoid arthritis, silicosis and bone marrow failure.
 XX
 XX Sequence 93 AA;
 XX
 XX Query Match 96.1%; Score 440; DB 18; Length 93;
 XX Best Local Similarity 92.5%; Pred. No. 1.7e-50;
 XX Matches 86; Conservative 1; Mismatches 6; Indels 0; Gaps 0;
 QY 1 MARLQALLVLLVLLVAVALQATGAGPYGANNEDSVCCRDYVRLPLXVXHXFWTSDSC 60
 DB 1 MARLQALLVLLVLLVAVALQATGAGPYGANNEDSVCCRDYVRLPLXVXHXFWTSDSC 60
 QY 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 DB 61 PRPGVLLTFRDKXICADPRVXXKMLNKLQ 93
 RESULT 15
 .AAW57881
 ID AAW57881 standard; Protein; 93 AA.
 XX
 XX AAW57881;
 XX
 XX 23-SEP-1998 (first entry)
 XX
 XX Human chemokine beta-13.
 XX
 XX Chemokine beta-13; human; Ckbeta-13; immune system-related disorder;
 XX tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis;
 XX autoimmune disease; bone marrow stem cell colony formation inhibitor;
 XX haematopoiesis regulator; therapy.
 XX
 XX Homo sapiens.
 XX

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:58 ; Search time 7.81513 Seconds
(without alignments)
350.133 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLQTAALLVLLVLAVALQ.....XICADPRVPPXXMKMLKLSLQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA.*
1: /cgn2.6/ptodata/1/1aa/5A-COMB.pep.*
2: /cgn2.6/ptodata/1/1aa/5B-COMB.pep.*
3: /cgn2.6/ptodata/1/1aa/6A-COMB.pep.*
4: /cgn2.6/ptodata/1/1aa/6B-COMB.pep.*
5: /cgn2.6/ptodata/1/1aa/PTCUS-COMB.pep.*
6: /cgn2.6/ptodata/1/1aa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	446	97.4	93	2	US-08-660-542-25
2	445	97.2	93	1	US-08-480-449-2
3	445	97.2	93	2	US-08-660-542-2
4	445	97.2	93	4	US-09-232-878-6
5	445	97.2	93	4	US-08-479-603-2
6	445	97.2	93	5	PCF-US95-07294-2
7	343	74.9	69	2	US-08-660-542-31
8	342	74.7	70	2	US-08-660-542-30
9	322	70.3	69	2	US-08-660-542-32
10	139	30.3	89	1	US-08-208-339A-4
11	139	30.3	89	3	US-08-722-719-6
12	137	29.9	78	1	US-08-375-346A-6
13	137	29.9	78	2	US-08-467-123B-6
14	137	29.9	89	4	US-09-334-951-6
15	127	27.7	95	4	US-09-230-637-26
16	123	26.9	70	4	US-09-334-951-65
17	121.5	26.5	91	1	US-08-480-449-21
18	121.5	26.5	91	2	US-08-660-542-21
19	121.5	26.5	91	4	US-08-679-493A-155
20	121.5	26.5	91	4	US-08-479-603-21
21	120.5	26.3	90	4	US-09-230-637-40
22	120.5	26.3	91	1	US-08-347-492B-12
23	120.5	26.3	91	1	US-08-375-346A-5
24	120.5	26.3	91	2	US-08-633-682-3
25	120.5	26.3	91	2	US-08-421-144A-8
26	120.5	26.3	91	2	US-08-798-143-12
27	120.5	26.3	91	2	US-08-467-123B-5

28	120.5	26.3	91	3	US-08-936-772-3	Sequence 3, Appl
29	120.5	26.3	91	4	US-08-836-922-14	Sequence 14, Appl
30	120.5	26.3	91	4	US-09-395-918-3	Sequence 3, Appl
31	120.5	26.3	91	4	US-09-230-371A-25	Sequence 25, Appl
32	119	26.0	93	1	US-08-173-209A-2	Sequence 2, Appl
33	119	26.0	93	1	US-08-347-492B-6	Sequence 6, Appl
34	119	26.0	93	2	US-08-798-143-6	Sequence 6, Appl
35	119	26.0	93	3	US-08-722-719-2	Sequence 2, Appl
36	119	26.0	93	4	US-09-180-077-7	Sequence 7, Appl
37	119	26.0	93	4	US-09-334-951-2	Sequence 2, Appl
38	119	26.0	93	5	PCF-US95-15484-6	Sequence 6, Appl
39	117	25.5	91	2	US-08-633-682-5	Sequence 5, Appl
40	117	25.5	91	3	US-08-936-772-5	Sequence 5, Appl
41	117	25.5	91	4	US-09-395-918-5	Sequence 5, Appl
42	117	25.5	91	4	US-08-679-493A-156	Sequence 156, App
43	117	25.5	94	4	US-09-230-371A-21	Sequence 21, Appl
44	115.5	25.2	92	1	US-07-792-988-2	Sequence 2, Appl
45	115.5	25.2	92	1	US-08-347-492B-11	Sequence 11, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-25
; Sequence 25, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69

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STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,449
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32779
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-480-449-2

Query Match 97.2%; Score 445; DB 1; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXVHXFWTSDSC 60
Db 1 MARLQATALLVLLVAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVXVHXFWTSDSC 60
QY 61 PRGVVLLTFRDKKICADPRVPVXKMLNKLQSQ 93
Db 61 PRGVVLLTFRDKKICADPRVPVXKMLNKLQSQ 93

RESULT 3
US-08-660-542-2
Sequence 2, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995

```



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;
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-660-542-2

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXVHXWTSQ 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVXVHXWTSQ 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93

RESULT 4
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, LiJan
; TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: US/09/232,878
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
; US-09-232-878-6

Query Match 97.2%; Score 445; DB 4; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXVHXWTSQ 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVXVHXWTSQ 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93

RESULT 5
US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; NAME: FERRARO, GREGORY D.

;
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-603-2

Query Match 97.2%; Score 445; DB 4; Length 93;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVXVHXWTSQ 60
Db 1 MARLQALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVYRPLPLRVXVHXWTSQ 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILKLSQ 93

RESULT 6
PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
```

REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-356
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 AMINO ACIDS

TYPE: AMINO ACID

STRANDEDNESS:

TOPOLOGY: LINEAR

MOLECULE TYPE: PROTEIN

PCT-US95-07294-2

Query Match 97.2% Score 445; DB 5; Length 93;

Best Local Similarity 93.5% Pred. No. 1.7e-52;

Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLVAVALQATGAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60

DB 1 MARLQALLVLLVLLVAVALQATGAGPYGANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSC 60

QY 61 PRGCVLLTFRDXKICADPRVPXXKMLNLSQ 93

DB 61 PRGCVLLTFRDXKICADPRVPXXKMLNLSQ 93

RESULT 7

US-08-660-542-31

Sequence 31, Application. US/08660542

Patent No. 5932703

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

TITLE OF INVENTION: ANALOGS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,542

FILING DATE:

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/558,658

FILING DATE: 16-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/479,620

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/33318

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 31:

SEQUENCE CHARACTERISTICS:

LENGTH: 69 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide
US-08-660-542-31

Query Match 74.9% Score 343; DB 2; Length 69;

Best Local Similarity 91.3% Pred. No. 5.9e-39;

Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 25 GPGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSCPRGCVLLTFRDXKICADPRVPXX 84

DB 1 GPGANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGCVLLTFRDXKICADPRVPYL 60

QY 85 KMLNLSQ 93

DB 61 KMLNLSQ 69

RESULT 8

US-08-660-542-30

Sequence 30, Application US/08660542

Patent No. 5932703

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

TITLE OF INVENTION: ANALOGS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,542

FILING DATE:

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/558,658

FILING DATE: 16-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/479,620

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/33318

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 30:

SEQUENCE CHARACTERISTICS:

LENGTH: 70 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-660-542-30

Query Match 74.7% Score 342; DB 2; Length 70;

Best Local Similarity 91.3% Pred. No. 8.2e-39;

Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 25 GPGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSCPRGCVLLTFRDXKICADPRVPXX 84

DB 2 GPGANNEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGCVLLTFRDXKICADPRVPWV 61

QY 85 KMILNLSQ 93
Db 62 KMILNLSQ 70

RESULT 9

US-08-660-542-32
; Sequence 32, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 32:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-660-542-32

Query Match 70.3%; Score 322; DB 2; Length 69;
Best Local Similarity 87.0%; Pred. No. 3.9e-36;
Matches 60; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 25 GPYGAMDSVCCRDYVRYRLPLXVYVXFXTSDSCPRGVVLLTFRDXKICADPRVPXX 84
Db 1 GPYGAMDSVCCRDYVRYRLPLRVVYKEYFTSDSCPRGVVLLTFRDXKICADPRVPW 60
QY 85 KMILNLSQ 93
Db 61 KMILNLSQ 69

RESULT 10

US-08-208-339A-4
; Sequence 4, Application US/08208339A
; Patent No. 5504003
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.

; TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/208,339A
; FILING DATE: 8 MARCH 1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-77
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-208-339A-4

Query Match 30.3%; Score 139; DB 1; Length 89;
Best Local Similarity 38.0%; Pred. No. 2e-11;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

QY 1 MARLQATLLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXFXTSDSC 60
Db 1 MRGLAALLVLLVCTMALC---SCAQVGTNKE--LCCLVYTSWQIPQKFIYDYSQSPC 54
QY 61 PRGVVLLTFRDXKICADP 79
Db 55 PRGVVLLTFRDXKICADP 73

RESULT 11

US-08-722-719-6
; Sequence 6, Application US/08722719
; Patent No. 6001606
; GENERAL INFORMATION:
; APPLICANT: ROSEN, CRAIG A.
; APPLICANT: RUBIN, STEVEN M.
; APPLICANT: LI, HAODONG
; APPLICANT: ADAMS, MARK D.

; TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
; TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
; TITLE OF INVENTION: FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
; TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:

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; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; US-08-722-719-6

Query Match 30.3%; Score 139; DB 3; Length 89;
Best Local Similarity 38.0%; Pred. No. 2e-11;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

QY 1 MARLQTLVLVLVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTSDSC 60
Db 1 MRGLAALLVLCTMALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54

QY 61 PRPGVLLTFRDKXICADP 79
Db 55 PRPGVLLTKRGQICADP 73

RESULT 12
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Sellhauer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3330 HILLVIEW AVENUE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: DOS
; SOFTWARE: IBM Compatible
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/467,123B
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/375,346
; FILING DATE: 19-JAN-1995
; ATTORNEY/AGENT INFORMATION:

; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/375,346A
; FILING DATE: 19-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LUTHER, BARBARA J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0026 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 855-0555
; TELEFAX: (415) 855-0572
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; US-08-375-346A-6

Query Match 29.9%; Score 137; DB 1; Length 78;
Best Local Similarity 38.2%; Pred. No. 3.2e-11;
Matches 29; Conservative 13; Mismatches 28; Indels 6; Gaps 2;

QY 4 LQTLVVVLVLVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTSDSCRP 63
Db 2 LAALLVLCTMALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 55

QY 64 GVLLTFRDKXICADP 79
Db 56 GVLLTKRGQICADP 71

RESULT 13
US-08-467-123B-6
; Sequence 6, Application US/08467123B
; Patent No. 5945506
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig C.
; APPLICANT: Sellhauer, Jeffrey J.
; TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; TITLE OF INVENTION: ITS PRODUCTION AND USES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,123B
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/375,346
; FILING DATE: 19-JAN-1995
; ATTORNEY/AGENT INFORMATION:
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; Sequence 26, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary
; APPLICANT: Nicholas, John
; APPLICANT: Hardwick, J. Marie
; APPLICANT: Reitz, Marvin
; TITLE OF INVENTION: NO. 6264958el Genes of Kaposi's Sarcoma
; FILE REFERENCE: 1107.78372
; CURRENT APPLICATION NUMBER: US/09/230,637
; CURRENT FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 60/022,591
; PRIOR FILING DATE: 1996-07-25
; PRIOR APPLICATION NUMBER: PCT US 97/12931
; PRIOR FILING DATE: 1997-07-24
; NUMBER OF SEQ ID NOS: 62
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 26
; LENGTH: 95
; TYPE: PRT
; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
US-09-230-637-26

Query Match          27.7%; Score 127; DB 4; Length 95;
Best Local Similarity 29.7%; Pred. No. 9,le-10;
Matches              27; Conservative 21; Mismatches 43; Indels 0; Gaps 0;

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Db      1 MAPVHVLCVSVILLATEFLPTESAGSLVSYPNCCCYGFQQHPPPVQIILKEWPTYSPAC 60
       || : | : | | | | | | : | : | : | : | : | : | : | : | : | : |

Qy      61 PRGVVLLTFRDXKICADPRVPXXKKMILNKL 91
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 12.6996 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLQTAALLVLLVLAVALQ.....XICADPRVFXKXKMLNKLQSQ 93

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 451899 seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published_Applications_AA:*

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- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pap:*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pap:*
- 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pap:*
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- 11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pap2:*
- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pap3:*
- 13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pap:*
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- 15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pap:*
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- 17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	445	97.2	93	10 US-09-837-446-6	Sequence 6, Appli
2	445	97.2	93	11 US-09-811-088-2	Sequence 2, Appli
3	445	97.2	93	15 US-10-314-410-2	Sequence 2, Appli
4	440	96.1	93	10 US-09-908-599-2	Sequence 2, Appli
5	440	96.1	93	10 US-09-908-600-2	Sequence 2, Appli
6	231	50.4	68	15 US-10-001-221A-3	Sequence 3, Appli
7	193	42.1	37	10 US-09-864-761-43730	Sequence 43730, A
8	177.5	38.8	67	15 US-10-001-221A-7	Sequence 7, Appli
9	139	30.3	89	10 US-09-334-923A-6	Sequence 6, Appli
10	139	30.3	89	10 US-09-334-954A-6	Sequence 6, Appli
11	139	30.3	97	10 US-09-925-302-792	Sequence 792, App
12	137	29.9	78	15 US-10-158-366-6	Sequence 6, Appli
13	132	28.8	89	10 US-09-834-795A-34	Sequence 34, Appli
14	132	28.8	89	12 US-09-834-794A-34	Sequence 34, Appli
15	125	27.3	69	11 US-09-792-793A-28	Sequence 28, Appli
16	124	27.1	78	15 US-10-001-221A-6	Sequence 6, Appli

17	123	26.9	70	10 US-09-334-923A-65	Sequence 65, Appl
18	123	26.9	70	10 US-09-334-954A-65	Sequence 65, Appl
19	120.5	26.3	91	8 US-08-927-939-21	Sequence 21, Appl
20	120.5	26.3	91	10 US-09-144-838-9	Sequence 9, Appli
21	120.5	26.3	91	10 US-09-834-795A-29	Sequence 29, Appl
22	120.5	26.3	91	12 US-09-834-794A-29	Sequence 29, Appl
23	120.5	26.3	91	12 US-09-920-137A-8	Sequence 8, Appli
24	120.5	26.3	91	12 US-09-537-858-1	Sequence 1, Appli
25	120.5	26.3	91	15 US-10-158-366-5	Sequence 5, Appli
26	120.5	26.3	91	15 US-10-057-275-8	Sequence 8, Appli
27	120.5	26.3	91	15 US-10-293-705-12	Sequence 12, Appl
28	119	26.0	87	15 US-10-153-064-86	Sequence 86, Appl
29	119	26.0	93	8 US-08-927-939-48	Sequence 48, Appl
30	119	26.0	93	10 US-09-334-923A-2	Sequence 2, Appli
31	119	26.0	93	10 US-09-834-795A-30	Sequence 30, Appl
32	119	26.0	93	10 US-09-334-954A-2	Sequence 2, Appli
33	119	26.0	93	12 US-09-834-794A-30	Sequence 30, Appl
34	119	26.0	93	12 US-09-372-348-5	Sequence 5, Appli
35	119	26.0	93	12 US-09-372-348-6	Sequence 6, Appli
36	119	26.0	93	12 US-09-372-348-7	Sequence 7, Appli
37	119	26.0	93	15 US-10-153-064-2	Sequence 2, Appli
38	119	26.0	93	15 US-10-293-705-6	Sequence 6, Appli
39	119	26.0	143	12 US-09-372-348-4	Sequence 4, Appli
40	117	25.5	73	10 US-09-144-838-6	Sequence 6, Appli
41	116	25.3	71	10 US-09-144-838-3	Sequence 3, Appli
42	115.5	25.2	92	8 US-08-927-939-20	Sequence 20, Appl
43	115.5	25.2	92	10 US-09-834-795A-31	Sequence 31, Appl
44	115.5	25.2	92	12 US-09-834-794A-31	Sequence 31, Appl
45	115.5	25.2	92	12 US-09-920-137A-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1
US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; PRIOR FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 97.2%; Score 445; DB 10; Length 93;
Best Local Similarity 93.5%; Pred. No. 4.3e-49;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTAALLVLLVLAVALQATEAGPYGANNEDSVCCRDYRVRLPLXVXHFXTSDSC 60
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Db 1 MARLQTAALLVLLVLAVALQATEAGPYGANNEDSVCCRDYRVRLPLXVXHFXTSDSC 60
|||||
QY 61 PRGVVLLTFRDXXICADPRVFXKXKMLNKLQSQ 93
|||||
Db 61 PRGVVLLTFRDXXICADPRVFXKXKMLNKLQSQ 93
|||||

RESULT 2
US-09-811-088-2

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; Sequence 2, Application US/09811088
; Patent No. US20020160446A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US/09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US/08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US/09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US/08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US/08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match          97.2%; Score 445; DB 11; Length 93;
Best Local Similarity 93.5%; Pred. No. 4.3e-49;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
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    |||||||
DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
    |||||||

RESULT 3
US-09-811-088-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US/09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US/08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US/09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US/08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US/08/843,651
; PRIOR FILING DATE: 1997-04-16
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; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          97.2%; Score 445; DB 15; Length 93;
Best Local Similarity 93.5%; Pred. No. 4.3e-49;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
    |||||||
DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
    |||||||

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PFI77P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match          96.1%; Score 440; DB 10; Length 93;
Best Local Similarity 92.5%; Pred. No. 1.9e-48;
Matches 86; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
DB 1 MARLQTALLVLLVLLAVALQATEAGPYGANNMEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
    |||||||
DB 61 PRPGVLLTFRDKKICADPRVPVXXKMILNKLQ 93
    |||||||

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,
```


STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICANT: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
FILING DATE: 09/484,221
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-908-600-2

Query Match 96.1%; Score 440; DB 10; Length 93;
Best Local Similarity 92.5%; Pred. No. 1.9e-48;
Matches 86; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQTLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||
Db 1 MARLQTLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
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Qy 61 PRPGVLLTFRDKXICADPRVPXXKMILKLSQ 93
|||||
Db 61 PRPGVLLTFRDKXICADPRVPVWVMILKLSQ 93
|||||

RESULT 6
US-10-001-221A-3
Sequence 3, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR FILING DATE: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 68
TYPE: PRT
ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 50.4%; Score 231; DB 15; Length 68;
Best Local Similarity 58.8%; Pred. No. 4.7e-22;
Matches 40; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 25 GPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSCPRPGVLLTFRDKXICADPRVPXX 84
|||||
Db 1 GPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSCPRPGVLLTFRDKXICADPRVWV 60
|||||

Qy 85 KMILNKLS 92
I :|||
Db 61 KKLHLKLS 68

RESULT 7

US-09-864-761-43730
Sequence 43730, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharon G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annonmax Sequence Listing Engine vers. 1.1
SEQ ID NO 43730
LENGTH: 37
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC004382.1
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
OTHER INFORMATION: EST_HUMAN HIT: W61220.1, EVALUE 8.50e-01
OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUE 3.00e-18
US-09-864-761-43730

SEQ ID NO 792
LENGTH: 97
TYPE: PRT
ORGANISM: Homo sapiens
US-09-925-302-792

Query Match 30.3%; Score 139; DB 10; Length 97;
Best Local Similarity 38.0%; Pred. No. 3.4e-10;
Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;

QY 1 MARQTALLVLLVALQATEAGPYGANNEDSVCCRDYVYRLPLXVXHFXTSDSC 60
Db 9 MKGLAALLVLCVTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 62
QY 61 PRPGVLLTFRDKKICADP 79
Db 63 PKPGVLLTKRGRQICADP 81

RESULT 12

US-10-158-366-6
Sequence 6, Application US/10158366
Publication No. US20020142398A1

GENERAL INFORMATION:

APPLICANT: Coleman, Roger
Wilde, Craig C.
TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
ITS PRODUCTION AND USES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/158,366
FILING DATE: 29-May-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
FILING DATE: 08-JUN-1995
APPLICATION NUMBER: US 08/375,346
FILING DATE: 19-JAN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-10-158-366-6
Query Match 29.9%; Score 137; DB 15; Length 78;
Best Local Similarity 38.2%; Pred. No. 4.8e-10;
Matches 29; Conservative 13; Mismatches 28; Indels 6; Gaps 2;

QY 4 LQTLALLVLLVALQATEAGPYGANNEDSVCCRDYVYRLPLXVXHFXTSDSCP 63

Db 2 LAAALLVLCVTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKP 55
QY 64 GVLLTFRDKKICADP 79
Db 56 GVLLTKRGRQICADP 71

RESULT 13

US-09-834-795A-34
Sequence 34, Application US/09834795A
Patent No. US20020076710A1

GENERAL INFORMATION:

APPLICANT: Lawrence, Papsidero
APPLICANT: Lyn, Dyster
APPLICANT: Jana, Frustaci
TITLE OF INVENTION: Detection and Treatment of Breast Cancer
FILE REFERENCE: 3380/11127-US3
CURRENT APPLICATION NUMBER: US/09/834,795A
CURRENT FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 09/146,580
PRIOR FILING DATE: 1998-09-03
PRIOR APPLICATION NUMBER: 60/071,899
PRIOR FILING DATE: 1998-01-20
PRIOR APPLICATION NUMBER: 60/092,155
PRIOR FILING DATE: 1998-07-09
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.0
SEQ ID NO 34
LENGTH: 89
TYPE: PRT
ORGANISM: Homo sapiens
US-09-834-795A-34

Query Match 28.8%; Score 132; DB 10; Length 89;
Best Local Similarity 36.7%; Pred. No. 2.4e-09;
Matches 29; Conservative 13; Mismatches 31; Indels 6; Gaps 2;

QY 1 MARQTALLVLLVALQATEAGPYGANNEDSVCCRDYVYRLPLXVXHFXTSDSC 60
Db 1 MKGLAALLVLCVTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54

QY 61 PRPGVLLTFRDKKICADP 79

Db 55 PKPGVLLTKRGRQICADP 73

RESULT 14

US-09-834-794A-34
Sequence 34, Application US/09834794A
Publication No. US20030026777A1

GENERAL INFORMATION:

APPLICANT: Lawrence, Papsidero
APPLICANT: Lyn, Dyster
APPLICANT: Jana, Frustaci
TITLE OF INVENTION: Detection and Treatment of Breast Cancer
FILE REFERENCE: 3380/11127-US4
CURRENT APPLICATION NUMBER: US/09/834,794A
CURRENT FILING DATE: 2001-04-13
PRIOR APPLICATION NUMBER: 09/146,580
PRIOR FILING DATE: 1998-09-03
PRIOR APPLICATION NUMBER: 60/071,899
PRIOR FILING DATE: 1998-01-20
PRIOR APPLICATION NUMBER: 60/092,155
PRIOR FILING DATE: 1998-07-09
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.0
SEQ ID NO 34
LENGTH: 89
TYPE: PRT
ORGANISM: Homo sapiens
US-09-834-794A-34

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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 106.676 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-25
Perfect score: 458
Sequence: 1 MARLQALLVLLVALQ.....XICADPRVPPXXKMLNKLQS 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues
Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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27:	/cgn2_6/ptodata/1/paa/US60_COMB.pcp.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	ID	Description
1	446	97.4	93	US-08-558-658-25
2	446	97.4	93	Sequence 25, Appl
3	446	97.4	93	Sequence 25, Appl
4	446	97.4	93	Sequence 25, Appl
5	446	97.4	93	Sequence 25, Appl
6	446	97.4	93	Sequence 25, Appl

7	445	97.2	93	1	PCT-US00-00953-6	Sequence 6, Appl
8	445	97.2	93	8	US-08-464-594-2	Sequence 2, Appl
9	445	97.2	93	8	US-08-479-620-2	Sequence 2, Appl
10	445	97.2	93	9	US-08-558-658-2	Sequence 2, Appl
11	445	97.2	93	11	US-08-760-127-3	Sequence 3, Appl
12	445	97.2	93	12	US-08-820-364-2	Sequence 2, Appl
13	445	97.2	93	13	US-08-925-857-12	Sequence 12, Appl
14	445	97.2	93	13	US-08-931-764-2	Sequence 2, Appl
15	445	97.2	93	13	US-08-931-764B-2	Sequence 2, Appl
16	445	97.2	93	13	US-08-939-107-2	Sequence 2, Appl
17	445	97.2	93	14	US-09-067-447-2	Sequence 2, Appl
18	445	97.2	93	14	US-09-067-447B-2	Sequence 2, Appl
19	445	97.2	93	14	US-09-067-447B-2	Sequence 2, Appl
20	445	97.2	93	19	US-09-509-165A-2	Sequence 2, Appl
21	445	97.2	93	19	US-09-591-992-2	Sequence 2, Appl
22	445	97.2	93	21	US-09-712-726-2	Sequence 2, Appl
23	445	97.2	93	21	US-09-791-537-22726	Sequence 2, Appl
24	445	97.2	93	22	US-09-811-088-2	Sequence 2, Appl
25	445	97.2	93	22	US-09-837-446-6	Sequence 6, Appl
26	445	97.2	100	21	US-09-760-476-2007	Sequence 2007, Ap
27	445	97.2	100	21	US-09-760-481-2004	Sequence 204, Ap
28	445	97.2	100	26	US-10-216-245-2007	Sequence 2007, Ap
29	445	97.2	100	26	US-10-216-388-204	Sequence 204, App
30	445	97.2	100	26	US-10-217-651-449	Sequence 449, App
31	440	96.1	93	1	PCT-US00-30237-2	Sequence 2, Appl
32	440	96.1	93	13	US-08-986-188-2	Sequence 2, Appl
33	440	96.1	93	18	US-09-432-768-2	Sequence 2, Appl
34	440	96.1	93	18	US-09-484-221-2	Sequence 2, Appl
35	440	96.1	93	23	US-09-908-599-2	Sequence 2, Appl
36	440	96.1	93	23	US-09-908-600-2	Sequence 2, Appl
37	440	96.1	93	25	US-10-132-438-2	Sequence 2, Appl
38	440	96.1	93	27	US-60-037-432-2	Sequence 2, Appl
39	436	95.2	93	14	US-09-067-447-41	Sequence 41, Appl
40	436	95.2	93	14	US-09-067-447-41	Sequence 41, Appl
41	436	95.2	93	19	US-09-509-165A-41	Sequence 41, Appl
42	413	90.2	86	13	US-08-925-857-10	Sequence 10, Appl
43	413	90.2	86	13	US-08-925-857-10	Sequence 10, Appl
44	343	74.9	69	13	US-08-939-107-31	Sequence 31, Appl
45	343	74.9	69	14	US-09-067-447-31	Sequence 31, Appl

ALIGNMENTS

RESULT 1
US-08-558-658-25
Sequence 25, Application US/08558658
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/558,658
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33009
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 amino acids

TYPE: amino acid

STRANDEDNESS: single.

TOPOLOGY: linear

MOLECULE TYPE: peptide

FEATURE:

NAME/KEY: Protein

LOCATION: 1..69

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 24 is selected from the

OTHER INFORMATION: group consisting of arginine, glycine, alanine,

OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,

OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,

OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,

OTHER INFORMATION: and methionine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 27 is independently

OTHER INFORMATION: selected from the group consisting of lysine, glycine,

OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,

OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,

OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,

OTHER INFORMATION: and methionine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 30 is independently

OTHER INFORMATION: selected from the group consisting of tyrosine,

OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,

OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 50 is independently

OTHER INFORMATION: selected from the group consisting of glutamic acid,

OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 59 is independently

OTHER INFORMATION: selected from the group consisting of tryptophan,

OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,

OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."

FEATURE:

NAME/KEY: misc_feature

OTHER INFORMATION:

OTHER INFORMATION: /note="The amino acid at position 60 is independently

OTHER INFORMATION: selected from the group consisting of valine, serine,

OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,

OTHER INFORMATION: asparagine, glutamine, and cysteine."

US-08-558-658-25

Query Match

Best Local Similarity 97.4%; Score 446; DB 9; Length 93;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVVAHFXTSDSC 60

|||||

Db 1 MARLQATLLVVLVLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVVAHFXTSDSC 60

|||||

Qy 61 PRPGVLLTFRDKXICADPRVPVXXMKMLNLSQ 93

Db 61 PRPGVLLTFRDKXICADPRVPVXXMKMLNLSQ 93

RESULT 2

US-08-939-107-25

; Sequence 25, Application US/08939107

; GENERAL INFORMATION:

; APPLICANT: Godiska, Ronald

; APPLICANT: Gray, Patrick W.

; APPLICANT: Raport, Carol J.

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND

; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC

; NUMBER OF SEQUENCES: 40

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

; STREET: 6300 Sears Tower, 233 South Wacker Drive

; CITY: Chicago

; STATE: Illinois

; COUNTRY: United States of America

; ZIP: 60606-6402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/939,107

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/558,658

; FILING DATE: 16-NOV-1995

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/479,620

; FILING DATE: 07-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: Gass, David A.

; REGISTRATION NUMBER: 38,153

; REFERENCE/DOCKET NUMBER: 27866/33318

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 312/474-6300

; TELEFAX: 312/474-0448

; TELEX: 25-3856

; INFORMATION FOR SEQ ID NO: 25:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 93 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; MOLECULE TYPE: linear

; FEATURE:

; NAME/KEY: Protein

; LOCATION: 1..69

; FEATURE:

; NAME/KEY: misc_feature

; OTHER INFORMATION:

; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the

; OTHER INFORMATION: group consisting of arginine, glycine, alanine,

; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,

; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,

; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,

; OTHER INFORMATION: and methionine."

; FEATURE:

; NAME/KEY: misc_feature

; OTHER INFORMATION:

; OTHER INFORMATION: /note="The amino acid at position 27 is independently

; OTHER INFORMATION: selected from the group consisting of lysine, glycine,

; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,

; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,

; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,

; OTHER INFORMATION: and methionine."

; FEATURE:

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; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-08-939-107-25
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Query Match          97.4%; Score 446; DB 13; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.2e-48;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARLQALLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHXWTSQSC 60
   |||||||
Db 1 MARLQALLVLLVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHXWTSQSC 60
   |||||||

Qy 61 PRPGVLLTFRDKXICADPRVPXXKMILNLSQ 93
   |||||||
Db 61 PRPGVLLTFRDKXICADPRVPXXKMILNLSQ 93
   |||||||
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RESULT 3

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US-09-067-447-25
; Sequence 25, Application US/09067447
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
```

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-09-067-447-25

Query Match          97.4%; Score 446; DB 14; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.2e-48;
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Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVVHFXTSDSC 60
|||||

Db 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVVHFXTSDSC 60
|||||

QY 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93
|||||

Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93
|||||

RESULT 4

US-09-067-447-25
; Sequence 25, Application US/09067447A
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
; FILE REFERENCE: 27866/34404
; CURRENT APPLICATION NUMBER: US/09/067,447A
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: 08/939,107
; EARLIER FILING DATE: 1997-09-26
; EARLIER APPLICATION NUMBER: 08/660,542
; EARLIER FILING DATE: 1996-06-07
; EARLIER APPLICATION NUMBER: 08/558,658
; EARLIER FILING DATE: 1995-11-16
; EARLIER APPLICATION NUMBER: 08/479,620
; EARLIER FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 25
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Artificial Sequence - Human MDC analog
; FEATURE:
; OTHER INFORMATION: The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arg, gly, ala, val, leu, ile,
; OTHER INFORMATION: pro, ser, thr, phe, tyr, trp, aspartate,
; OTHER INFORMATION: glutamate, asn, gln, cys, and met
; FEATURE:
; OTHER INFORMATION: The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lys, gly,
; OTHER INFORMATION: ala, val, leu, ile, pro, ser, thr, phe, tyr, trp,
; OTHER INFORMATION: aspartate, glutamate, asn, gln, cys, and met
; FEATURE:
; OTHER INFORMATION: The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyr, ser,
; OTHER INFORMATION: lys, arg, his, aspartate, glutamate, asn, gln, and
; OTHER INFORMATION: cys
; FEATURE:
; OTHER INFORMATION: The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glu, lys,
; OTHER INFORMATION: arg, his, gly, and ala
; FEATURE:
; OTHER INFORMATION: The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of trp, ser,
; OTHER INFORMATION: lys, arg, his, aspartate, glutamate, asn, gln, and
; OTHER INFORMATION: cys
; FEATURE:
; OTHER INFORMATION: The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of val, ser,
; OTHER INFORMATION: lys, arg, his, aspartate, glutamate, asn, gln, and
; OTHER INFORMATION: cys
; OTHER INFORMATION: cys

US-09-067-447-25

Query Match

97.4%; Score 446; DB 14; Length 93;

Best Local Similarity

100.0%; Pred. No. 2.2e-48;

Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVVHFXTSDSC 60
|||||

Db 1 MARLQALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVVHFXTSDSC 60
|||||

QY 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93
|||||

Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93
|||||

RESULT 5

US-09-067-447B-25
; Sequence 25, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Deelev, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,


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Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93

RESULT 8
US-08-464-594-2
; Sequence 2, Application US/08464594
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,594
; FILING DATE: June 5, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 97.2%; Score 445; DB 8; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93

RESULT 9
US-08-479-620-2
; Sequence 2, Application US/08479620
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
```

```
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,620
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32628
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELETYPE: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-620-2

Query Match 97.2%; Score 445; DB 8; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Db 1 MARLQATLLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMILNLSQ 93

RESULT 10
US-08-558-658-2
; Sequence 2, Application US/08558658
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/558,658
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
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NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33009
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-558-658-2

Query Match 97.2%; Score 445; DB 9; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48; 6; Indels 0; Gaps 0;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60

QY 61 PRPGVLLTFRDKKXICADPRVPVXXMILNKLQ 93
DB 61 PRPGVLLTFRDKKXICADPRVPVXXMILNKLQ 93

RESULT 11
US-08-760-127-3
Sequence 3, Application US/08760127
GENERAL INFORMATION:
APPLICANT: Chang, Ming-shi
APPLICANT: Andrew, David P.
TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Amgen Inc.
STREET: 1840 De Havilland Drive
CITY: Thousand Oaks
STATE: California
COUNTRY: U.S.A.
ZIP: 91320
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,127
FILING DATE: 03-DEC-1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Whiteford, Wendy A.
REGISTRATION NUMBER: 36,964
REFERENCE/DOCKET NUMBER: A-429
TELECOMMUNICATION INFORMATION:
TELEPHONE: (805) 447-1008
TELEFAX: (805) 447-1090
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-760-127-3

Query Match 97.2%; Score 445; DB 11; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48; 6; Indels 0; Gaps 0;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60

DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
QY 61 PRPGVLLTFRDKKXICADPRVPVXXMILNKLQ 93
DB 61 PRPGVLLTFRDKKXICADPRVPVXXMILNKLQ 93

RESULT 12
US-08-820-364-2
Sequence 2, Application US/08820364
GENERAL INFORMATION:
APPLICANT: Gearing, David P.
APPLICANT: Pan, Yang
TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/820,364
FILING DATE: 12-MAR-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meiklejohn, Ph.D., Anita L.
REGISTRATION NUMBER: 35,283
REFERENCE/DOCKET NUMBER: 07334/023001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-820-364-2

Query Match 97.2%; Score 445; DB 12; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48; 6; Indels 0; Gaps 0;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60
DB 1 MARLQATALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHFXYWTSQ 60

QY 61 PRPGVLLTFRDKKXICADPRVPVXXMILNKLQ 93
DB 61 PRPGVLLTFRDKKXICADPRVPVXXMILNKLQ 93

RESULT 13
US-08-925-857-12
Sequence 12, Application US/08925857
GENERAL INFORMATION:
APPLICANT: Gorman, Daniel M.
APPLICANT: Hedrick, Joseph A.
APPLICANT: Zlotnik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: DNAX Research Institute

STREET: 901 California Avenue
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925.857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025.724
FILING DATE: 10-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0614K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-925-857-12

Query Match 97.2%; Score 445; DB 13; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60
Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLQ 93

RESULT 14

US-08-931-764-2
Sequence 2, Application US/08931764
GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC)
TITLE OF INVENTION: AS AN ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
TITLE OF INVENTION: OF LENTIVIRUS INFECTION
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/931.764
FILING DATE: To be assigned

CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Mistrock, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 8769-029
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
TELEFAX: 212-869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-931-764-2

Query Match 97.2%; Score 445; DB 13; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60
Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLQ 93

RESULT 15

US-08-931-764B-2
Sequence 2, Application US/08931764B
GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-Viral
TITLE OF INVENTION: Agent for the Treatment and Prevention of Lentivirus
TITLE OF INVENTION: Infection
FILE REFERENCE: MDC
CURRENT APPLICATION NUMBER: US/08/931.764B
CURRENT FILING DATE: 1997-09-16
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 2
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
US-08-931-764B-2

Query Match 97.2%; Score 445; DB 13; Length 93;
Best Local Similarity 93.5%; Pred. No. 3e-48;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYXHFXTSDSC 60
Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLQ 93
Db 61 PRPGVLLTFRDKXICADPRVPVXXKMLNKLQ 93

Search completed: July 28, 2003, 04:14:53
Job time : 106.676 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 32.8235 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165a-25
Perfect score: 458
Sequence: 1 MARLQATALLVLLVLAVALQ.....XICADPRVPXKXKMLNKLQSQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 123328 seqs, 264332421 residues

Total number of hits satisfying chosen parameters: 12332328

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New.*

- 1: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep.*
- 2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4.*
- 3: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep.*
- 4: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4.*
- 5: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep.*
- 6: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep4.*
- 7: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep.*
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- 9: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep.*
- 10: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep4.*
- 11: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep.*
- 12: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep4.*
- 13: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep.*
- 14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	445	97.2	93	2	PCT-US02-35606-109
2	445	97.2	93	2	PCT-US02-35606-146
3	445	97.2	93	2	PCT-US02-40891-473
4	445	97.2	93	2	PCT-US02-40891-549
5	445	97.2	93	2	PCT-US02-40891-638
6	445	97.2	93	2	PCT-US02-40891-639
7	445	97.2	93	2	PCT-US02-40891-640
8	445	97.2	93	2	PCT-US02-40891-641
9	445	97.2	93	12	US-10-314-410-2
10	445	97.2	93	12	US-10-405-027-5105
11	445	97.2	93	12	US-10-445-790-2
12	445	97.2	93	14	US-60-453-135-8659
13	445	97.2	93	14	US-60-453-050-8659
14	445	97.2	93	14	US-60-455-444-4765
15	445	97.2	93	14	US-60-465-241-4765
16	445	97.2	93	14	US-60-466-412-8659
17	440	96.1	93	12	US-10-285-572-2
18	440	96.1	93	12	US-10-137-438A-2
19	440	96.1	93	12	US-10-406-494-2

20	345	75.3	678	2	PCT-US02-40891-333	Sequence 333, App
21	342	74.7	69	12	US-10-341-931-2	Sequence 2, Appl1
22	342	74.7	172	12	US-10-335-394-49	Sequence 49, Appl1
23	342	74.7	334	12	US-10-335-394-53	Sequence 53, Appl1
24	342	74.7	587	12	US-10-335-394-50	Sequence 50, Appl1
25	336.5	73.5	677	2	PCT-US02-40891-422	Sequence 422, App
26	336	73.4	678	2	PCT-US02-40891-257	Sequence 257, App
27	331	72.3	676	2	PCT-US02-40891-424	Sequence 424, App
28	329	71.8	677	2	PCT-US02-40891-423	Sequence 423, App
29	323	70.5	676	2	PCT-US02-40891-425	Sequence 425, App
30	231	50.4	68	10	US-09-839-445-3	Sequence 3, Appl1
31	231	50.4	68	12	US-10-001-221A-3	Sequence 3, Appl1
32	177.5	38.8	67	10	US-09-839-445-7	Sequence 7, Appl1
33	177.5	38.8	67	12	US-10-001-221A-7	Sequence 7, Appl1
34	139	30.3	89	2	PCT-US02-40891-546	Sequence 546, App
35	139	30.3	89	2	PCT-US02-40891-561	Sequence 561, App
36	139	30.3	89	2	PCT-US02-40891-562	Sequence 562, App
37	139	30.3	89	2	PCT-US02-40891-564	Sequence 564, App
38	139	30.3	89	2	PCT-US02-40891-565	Sequence 565, App
39	139	30.3	89	2	PCT-US02-40891-566	Sequence 566, App
40	139	30.3	89	2	PCT-US02-40891-567	Sequence 567, App
41	139	30.3	89	12	US-10-165-233A-6	Sequence 6, Appl1
42	139	30.3	89	12	US-10-405-027-2964	Sequence 2964, Ap
43	139	30.3	89	12	US-10-405-027-3164	Sequence 3164, Ap
44	139	30.3	89	12	US-10-405-027-4466	Sequence 4466, Ap
45	139	30.3	89	12	US-10-058-270A-100	Sequence 100, App

ALIGNMENTS

RESULT 1

PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred No. 2e+50; 6; Indels 0; Gaps 0;

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DB	1	MARLQATALLVLLVLAVALQATAGPYGANNEDSVCCRDYVRYRLPLRVYRHFVWTSDSC 60
QY	61	PRGCVLLTFRDXKICADPRVPXKXKMLNKLQSQ 93
DB	61	PRGCVLLTFRDXKICADPRVPXKXKMLNKLQSQ 93

RESULT 2

PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046

;; PRIOR FILING DATE: 2001-11-07
;; NUMBER OF SEQ ID NOS: 160
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 146
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
|||||
Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93

RESULT 3
PCT-US02-40891-473
; Sequence 473, Application PC/TUS02040891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
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RESULT 4
PCT-US02-40891-549
; Sequence 549, Application PC/TUS02040891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-549

Query Match 97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
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Db 1 MARLQTALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSC 60

QY 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93
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Db 61 PRPGVLLTFRDKKICADPRVPVXXKMILNLSQ 93

RESULT 5
PCT-US02-40891-638
; Sequence 638, Application PC/TUS02040891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611

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; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Qy 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93
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RESULT 6
PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93

RESULT 7
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
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Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93

RESULT 8
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
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Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
Qy 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93

RESULT 7
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          97.2%; Score 445; DB 2; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARLQATLLVLLVLLAVALQATGAGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSC 60

Qy 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 61 PRPGVLLTFRDKKXICADPRVPXXKMILNKLQ 93

RESULT 8
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
```

```

; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed
; NUMBER OF SEQ ID NOS: 2232
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
; PCT-US02-40891-641

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	Query Match	97.28;	Score 445;	DB 2;	Length 93;
	Best Local Similarity	93.56;	Pred. No. 2e-50;		
	Matches 87;	Conservative 0;	Mismatches 6;	Indels 0;	Gaps 0;
Qy	1	MARLQATALLVVLVLLAVALQATEAGPYGANNEDSVCCCRDYYVRYRLPLXVVXHFYWTSDSC	60		
Db	1	MARLQATALLVVLVLLAVALQATEAGPYGANNEDSVCCCRDYYVRYRLPLXVVXHFYWTSDSC	60		
Qy	61	PRPGVLLTTFDRKXICADPRVPVXXKMILNLSQ	93		
Db	61	PRPGVLLTTFDRKFCICADPRVPVYKMTINKLSQ	93		

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RESULT 9
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

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	Query Match	97.2%	Score 445:	DB 12:	Length 93:
	Best Local Similarity	93.5%	Pred. No. 2e-50:		
	Matches 87:	Conservative	0:	Mismatches 6:	Indels 0:
					Gaps 0:
Qy	1	MARLOTALLVVLVLLAVALQATGAGPYGANNESVCCRDYRVYRLPLXVYHXWTSDC	60		
Db	1	MARLOTALLVVLVLLAVALQATGAGPYGANNESVCCRDYRVYRLPLXVYHXWTSDC	60		
Qy	61	PRGCVLLTFRDKXICADPRVPXXKMILNLSQ	93		
Db	61	PRGCVLLTFRDKXICADPRVPXXKMILNLSQ	93		

```

RESULT 10
> US-10-405-027-5105
> Sequence 5105, Application US/104050527
> GENERAL INFORMATION:
> ? APPLICANT: Rosen et al.
> ? TITLE OF INVENTION: Human Secreted Proteins
> ? FILE REFERENCE: PS806P1
> ? CURRENT APPLICATION NUMBER: US/10/405,027
> ? CURRENT FILING DATE: 2003-04-07
> ? PRIOR APPLICATION NUMBER: 60/369,608
> ? PRIOR FILING DATE: 2002-04-04
> ? PRIOR APPLICATION NUMBER: 60/376,175
> ? PRIOR FILING DATE: 2002-04-30
> ? NUMBER OF SEQ ID NOS: 5810
> ? SOFTWARE: Patentin Ver. 2.0
> ? SEQ ID NO 5105
> ? LENGTH: 93
> ? TYPE: PRT
> ? ORGANISM: Homo sapiens
> US-10-405-027-5105

```

	Query Match	97.28;	Score 445;	DB 12;	Length 93;
	Best Local Similarity	93.5;	Pred. No. 2e-50;		
	Matches 87;	Conservative	0;	Mismatches 6;	Indels 0; Gaps 0;
Qy	1	MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCCRDYYRVRRLPLXVYVXHFWTSDSC	60		
Db	1	MARLQTALLVVLVLLAVALQATEAGPYGANNEDSVCCCRDYYRVRRLPLXVYVXHFWTSDSC	60		
Qy	61	PRPGVLLITFRDKXICADPRVPVXXXKMILNLSQ	93		
Db	61	PRPGVLLITFRDKFICADPRVPVVKMILNLSQ	93		

```

RESULT 11
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: SeqIn version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2

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Query Match          97.2%; Score 445; DB 12; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||

RESULT 12
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: IAKOUBOVA, Olga
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-135-8659

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||

RESULT 13
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: LUKE, May
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-050-8659

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||

Query Match          97.2%; Score 445; DB 12; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
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Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||

RESULT 14
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-455-444-4765

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||

RESULT 15
US-60-465-241-4765
; Sequence 4765, Application US/60465241
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001468
; CURRENT APPLICATION NUMBER: US/60/465,241
; CURRENT FILING DATE: 2003-04-23
; NUMBER OF SEQ ID NOS: 258418
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-465-241-4765

Query Match          97.2%; Score 445; DB 14; Length 93;
Best Local Similarity 93.5%; Pred. No. 2e-50;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVXHFXTSDSC 60
    |||||||
Db 1 MARLOTALLVVLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLRVVXHFYWTSDSC 60
    |||||||
QY 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||
Db 61 PRPGVLLTFRDKKXICADPRVPVXXKMILNLSQ 93
    |||||||

Search completed: July 28, 2003, 04:18:50
Job time : 33.8235 secs
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RESULT 3

A28815
monocyte chemoattractant cytokine RANTES precursor - human
N:Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
C:Species: Homo sapiens (man)
C>Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998
C:Accession: A28815
R:Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M;
J. Immunol. 141, 1018-1025, 1988
A:Title: A human T cell-specific molecule is a member of a new gene family.
A:Reference number: A28815; MUID:88285659; PMID:2456327
A:Accession: A28815
A:Molecule type: mRNA
A:Residues: 1-91 <SCH>
A:CROSS-references: GB:M21121
E:Comment: The acronym RANTES reflects the description "Regulated upon Activation,
C:Genetics:
A:Gene: GDB:SCYA5; D17S136E
A:CROSS-references: GDB:I20749; OMIM:187011
A:Map position: 17q11.2-17q12
C:Superfamily: macrophage inflammatory protein
C:Keywords: chemotaxis; cytokine; immediate-early protein; inflammation; T-cell
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-91/Product: T-cell protein RANTES #status predicted <MAT>

Query Match 26.5%; Score 121.5; DB 1; Length 91;
Best Local Similarity 29.9%; Pred. No. 1.3e-07;
Matches 26; Conservative 20; Mismatches 38; Indels 3; Gaps 2;

QY 6 TALLVVLVLLAVALQA-TEAGPYGNMDSVCDDVVRYRLPLXVVXHFXWTSDSCPARG 64
|| : || : || : || : || : || : || : || : || : || : || : || : || : ||
Db 4 SAAALAVILIALCALCAPASAPYSS--DTTPCCFYAIRPLRAHIKEIFYTSGKCSNPA 61
|| : || : || : || : || : || : || : || : || : || : || : || : || :

QY 65 VVLLTFRRXXICADPRVPXXXKMILNKL 91
|| : || : || : || : || : || : || : || : || : || : || : || : || : ||
Db 62 VVFVTRKNQVCANPEKKWREVINSL 88
|| : || : || : || : || : || : || : || : || : || : || : || : || :

RESULT 4

A46539
monocyte chemoattractant cytokine RANTES precursor - mouse
N:Alternate names: MuRantes
C:Species: Mus musculus (house mouse)
C>Date: 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jun-1999
C:Accession: I48875; A46539; I48654; I56970
R:Danoff, T.M.; Lallely, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A:Title: Cloning, genomic organization, and chromosomal localization of the Scya5 g-
A:Reference number: I48875; MUID:94132613; PMID:7507961
A:Accession: I48875
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-91 <DNA>
A:CROSS-references: EMBL:U02298; NID:g460090; PIDN:AAA18302.1; PID:g460091
R:Schall, T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J. Immunol. 22, 1477-1481, 1992
A:Title: Molecular cloning and expression of the murine RANTES cytokine: structural
A:Reference number: A46539; MUID:92289805; PMID:1376260

A;Residues: 1-18, 'A', '20'-91 <SCH>
A;Cross-references: GB:S37648; NID:g250207; PIDN:AB22330.1; PID:g250208
A;Experimental source: macrophage cell line P03-1.8
A;Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIPI:106770)
R;Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Pazniskas, W.A.—
Mol. Cell. Biol. 14, 2914-2925, 1994
A;Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region
A;Reference number: I48654; MUID:94217689; PMID:7513046
A;Accession: I48654
A;Status: translation not shown; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-91 <SHI>

A:Reference number: S10157; MUID:90287702; PMID:1972563
A:Accession: S10157
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-93 <IRV>
A:Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666
C:Comment: This protein is a member of a "small inducible" or "activation specific" g
C:Genetics:
A:Gene: GDB:SCYA4
A:Cross-references: GDB:120369; OMIM:182284
A:Map position: 17q11-17q21
A:Introns: 26/1; 64/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-93/Product: LD78-beta protein #status predicted <MAT>

Query Match 24.9% Score 114; DB 2; Length 93;
Best Local Similarity 34.2% Pred. No. 11e-06;
Matches 25; Conservative 13; Mismatches 33; Indels 2; Gaps 2;

QY 7 ALLVIVLLAVALQATGAGYGANMEDSVCCRDYVRYRLPLXVVVHXFXTSDSCPRGVV 66
DB 7 ALAVLLCTMALCNQVLSA-PLAAD-TPTACCFSTSRQIPQNFADYFETSSQCSKPSVI 64
QY 67 LLTFRDKXICADP 79
DB 65 FLTKRGVQCADP 77

RESULT 8
C30552
macrophage inflammatory protein 1-beta precursor - mouse
N:Alternate names: HA00; SFS gamma; T-cell activation protein gamma
C:Species: Mus musculus (house mouse)
C:Date: 28-Aug-1989 #sequence,revision 28-Aug-1989 #text_change 16-Jul-1999
C:Accession: C30552; JLO088; PS0304; S22042
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A:Title: A family of small inducible proteins secreted by leukocytes are members of
s of various activation processes.
A:Reference number: A30552; MUID:89093958; PMID:2521353
A:Accession: C30552
A:Molecule type: mRNA
A:Residues: 1-92

A:Cross-references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245
R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.;
J. Exp. Med. 168, 2251-2259, 1988
A:Title: Resolution of the two components of macrophage inflammatory protein 1, and
A:Reference number: JLO088; MUID:89067830; PMID:3058856
A:Accession: JLO088
A:Molecule type: mRNA
A:Residues: 1-92 <SHE>
A:Cross-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:gl99697
A:Accession: PS0304
A:Molecule type: protein
A:Residues: 24-33, 'XX', '36', 'X', '38' <SH2>
R:Daubersies, P.; Lepretre, F.; Baillieu, B.; Grove, M.; Pragnell, I.; Plumb, M.
submitted to the EMBL Data Library, October 1991
A:Description: Sequence of the murine macrophage inflammatory protein 1b gene.
A:Reference number: S22042
A:Accession: S22042
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-92 <DAU>
A:Cross-references: EMBL:X62502; NID:g53126; PIDN:CAA44364.1; PID:g53127
C:Comment: This protein is a monokine.
C:Genetics:
A:Introns: 26/1; 64/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>

RESULT 10
JC5295

RESULT 12
I48147
monocyte chemoattractant protein-1 - guinea pig
C:Species: Cavia porcellus (guinea pig)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
C:Accession: I48147
R:Yoshimura, T.
J. Immunol. 150, 5025-5032, 1993
A:Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression

A:Reference number: I48147; MUID:93267104; PMID:8496603
A:Accession: J148147
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-120 <RES>
A:Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821
C:Genetics:
A:Gene: MCP-1
C:Superfamily: macrophage inflammatory protein

Query Match 21.4%; Score 98; DB 2; Length 120;
Best Local Similarity 31.5%; Pred. No. 0.00013;
Matches 28; Conservative 15; Mismatches 42; Indels 4; Gaps 3;
QY 6 TALLVVLVLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYVXH-F-XWTSQSCPRPG 64
DB 5 SVLLCLLVIEATFCSLLMAQPDGVN--TPTCCYTNK-QIPLKRVKGVERTSSRCPOEA 61
QY 65 VVLTFRDKXICADRPVXXKMTLNLSQ 93
DB 62 VIFRTLKNKEVCADPTQKWQDYIAQLDQ 90

RESULT 13
JC2417
monocyte chemoattractant protein-2 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
C:Accession: JC2417
R:Hosang, K.; Kloudny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 205, 148-153, 1994
A:Reference number: JC2417; MUID:95091716; PMID:7995015
A:Accession: JC2417
A:Molecule type: mRNA
A:Residues: 1-99 <HOS>
A:Cross-references: GB:Z48480; NID:g683718; PIDN:CAA88371.1; PID:g683719
A:Experimental source: corpus luteum
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match 20.2%; Score 92.5; DB 2; Length 99;
Best Local Similarity 28.7%; Pred. No. 0.0005;
Matches 29; Conservative 19; Mismatches 36; Indels 17; Gaps 5;
QY 4 LQTLVVLVLAVALQATE--AGPYGANNEDSV-----CCRDYVRYRLPLXVYVXH-F-W 55
DB 1 MQVSAALLCLLITTAFASTQVLAQP-----DSVSIPTCCFGLVNGKIPFKLESYTRI 54
QY 56 TSDSCPRGVVLLTFRDKXICADRP---VPXXKMTLNLSQ 93
DB 55 TNSQCPQEAIVFTKADKEVCADPQKWQNSMKLLDQKSQ 95

RESULT 14
A60299
monocyte chemoattractant protein 1 precursor - human
N:Alternate names: GDCF-1; glioma-derived monocyte chemoattractant factor 1; MCAF; MCP-1; MCP-1; Contains: glioma-derived chemotactic factor 2 (GDCF-2)
C:Species: Homo sapiens (man)
C:Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999
C:Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32336; A34561; I57488; JCI
R:Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
Biochem. Biophys. Res. Commun. 169, 346-351, 1990
A:Title: Structure of human monocyte chemoattractant protein gene and its regulation by TPA.
A:Reference number: A35474; MUID:90290466; PMID:2357211
A:Accession: A35474
A:Molecule type: DNA
A:Residues: 1-99 <SHY>
A:Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989

A:Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A:Reference number: A33476; MUID:90097880; PMID:2513477
A:Accession: A33476
A:Molecule type: mRNA
A:Residues: 1-99 <ROL>
A:Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; R:Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J. FEBS Lett. 244, 487-493, 1989
A:Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning
A:Reference number: S03339; MUID:89153605; PMID:2465924
A:Accession: S03339
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <YOS>
A:Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
R:Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A:Title: Human monocyte chemoattractant protein-1 (MCP-1).
A:Reference number: I51841; MUID:92095166; PMID:1661560
A:Accession: I51841
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-99 <YO2>
A:Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R:Bottozzini, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A. Int. J. Cancer 45, 795-797, 1990
A:Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactin-1/MCAF).
A:Reference number: A60299; MUID:90216082; PMID:2182547
A:Accession: A60299
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <BOT>
R:Furutani, Y.; Nomura, H.; Notake, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, J. Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A:Title: Cloning and sequencing of the cDNA for human monocyte chemoattractant and activation
A:Reference number: A32300; MUID:89165862; PMID:2923622
A:Accession: A32300
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <FUR>
R:Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, R. Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
A:Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative
A:Reference number: A32396; MUID:89184525; PMID:2648385
A:Accession: A32396
A:Molecule type: protein
A:Residues: 'X', 25-99 <ROB>
R:Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J. Biochem. Biophys. Res. Commun. 167, 904-909, 1990
A:Title: Identification of the monocyte chemoattractant protein from human osteosarcoma
A:Reference number: A34561; MUID:90211336; PMID:2322286
A:Accession: A34561
A:Molecule type: protein
A:Residues: 29-33, 'XX', 36-52; 82-92 <DEC>
R:Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P. Mol. Cell. Biochem. 126, 61-68, 1993
A:Title: The expression of monocyte chemoattractant protein (MCP-1) in human vascular en-
A:Reference number: I57488; MUID:94150478; PMID:8107690
A:Accession: I57488
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-99 <LIY>
A:Cross-references: GB:S69738; NID:g545464; PIDN:AAB29926.1; PID:g545465
R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F. Chinese J. Microbiol. Immunol. 14, 29-32, 1994
A:Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1
A:Reference number: JC1096
A:Accession: JC1096
A:Molecule type: mRNA

Search completed: July 28, 2003, 04:15:50
Job time : 10.1828 secs

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 4.88445 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-25

Perfect score: 458

Sequence: 1 MARLQTAFLVLLVLAVALQ.....XICADPRVPPXXRMILNKLQ 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	445	97.2	93	1 SY22_HUMAN	O00626 homo sapien
2	297	64.8	92	1 SY22_MOUSE	O88430 mus musculus
3	139	30.3	89	1 SY18_HUMAN	P55774 h small ind
4	130.5	28.5	90	1 SY04_CHICK	Q90826 gallus gall
5	130	28.4	92	1 SY03_RAT	P50229 rattus norv
6	123.5	27.0	92	1 SY03_MOUSE	P10855 mus musculus
7	121.5	26.5	91	1 SY05_HUMAN	P13501 homo sapien
8	119	26.0	93	1 SY14_HUMAN	Q16627 homo sapien
9	117	25.5	91	1 SY05_MOUSE	P30882 mus musculus
10	116.5	25.4	92	1 SY05_RAT	P50231 rattus norv
11	115.5	25.2	92	1 SY04_HUMAN	P13236 h small ind
12	114	24.9	92	1 SY03_HUMAN	P10147 homo sapien
13	114	24.9	93	1 SY03_HUMAN	P16619 homo sapien
14	112.5	24.6	91	1 SY05_CAVPO	P97272 cavia porce
15	110.5	24.1	92	1 SY04_RAT	P50230 rattus norv
16	110	24.0	113	1 SY15_HUMAN	Q16663 homo sapien
17	109.5	23.9	91	1 SY05_BOVIN	O97919 bos taurus
18	109.5	23.9	104	1 SY12_MOUSE	O62401 mus musculus
19	108	23.6	94	1 SY17_HUMAN	Q92883 homo sapien
20	107	23.4	94	1 VM12_KSHV	Q98157 kaposi's sa
21	106.5	23.3	92	1 SY04_MOUSE	P14097 mus musculus
22	103.5	22.6	99	1 SY07_HUMAN	P80098 homo sapien
23	103	22.5	99	1 SY08_HUMAN	P80075 homo sapien
24	98.5	21.5	92	1 SY04_RABIT	P46632 oryctolagus
25	98	21.4	120	1 SY02_CAVPO	Q08782 cavia porce
26	96.5	21.1	70	1 REG1_BOVIN	P82943 bos taurus
27	95	20.7	98	1 SY19_HUMAN	O99731 homo sapien
28	93.5	20.4	98	1 SY13_HUMAN	O99616 homo sapien
29	92.5	20.2	99	1 SY08_PIG	P49873 sus scrofa
30	92	20.1	101	1 SY02_CANFA	P52203 canis famil
31	91.5	20.0	108	1 SY19_MOUSE	O70460 mus musculus
32	91	19.9	99	1 SY02_HUMAN	P13500 homo sapien
33	90	19.7	97	1 EOTA_HUMAN	P51671 homo sapien

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE-97296313; PubMed-9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.;			
RA	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells.";			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Macrophage;			
RC	MEDLINE-97460118; PubMed-9312138;			
RX	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.;			
RA	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes.";			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE-99425270; PubMed-10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R., Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RA	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q.";			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Pancreas, and Spleen;			
RC	Strausberg R.;			
RA	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RL	[5]			
RN	RECEPTOR INTERACTION.			
RP	MEDLINE-98104168; PubMed-9430724;			
RX	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., Yoshie O., Gray P.W.;			
RA	"Macrophage-derived chemokine is a functional ligand for the CC			

O9myh4 macaca fasc
O89093 mus musculus
O91kc0 mus musculus
P55773 homo sapien
Q9y258 homo sapien
P28291 bos taurus
O00175 homo sapien
P14844 rattus norv
O9z121 mus musculus
O09141 bos taurus
P27784 mus musculus
P28292 oryctolagus

ALIGNMENTS

```

RT chemokine receptor 4."
RL J. Biol. Chem. 273:1764-1768(1998).
CC -1- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; U83171; AAB58360.1; -
DR EMBL; U83239; AAB53372.1; -
DR EMBL; AC004382; AAC24306.1; -
DR EMBL; BC027952; AAH27952.1; -
DR HSSP; Q98157; ICM9.
DR Genew; HGNC:10621; SCYA22.
DR MIM; 602957; -
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 24
FT CHAIN 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 97.28; Score 445; DB 1; Length 93;
Best Local Similarity 93.58; Pred. No. 1.9e-46;
Matches 87; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVYVXFWTSDSC 60
Db 1 MARLQALLVVLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVYVXFWTSDSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93
Db -61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 93

RESULT 2
SY22_MOUSE
ID SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CC122) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;

```

```

[1]
RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardali E., Sallusto F., Speletas M., Ruedl C.,
RA Shmizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -1- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; AF052505; AAC40200.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;

Query Match 64.88; Score 297; DB 1; Length 92;
Best Local Similarity 59.88; Pred. No. 9.6e-29;
Matches 55; Conservative 17; Mismatches 20; Indels 0; Gaps 0;

Qy 1 MARLQALLVVLVLLVALQATEAGPYGANNEDSVCCRDYVYRPLPLXVYVXFWTSDSC 60
Db 1 MATLRVPLLVLLVALVAIQTSADGPGYGANVEDSICCDYIRHPLPSRLVKEFFWTSKSC 60

Qy 61 PRPGVLLTFRDKXICADPRVPVXXKMILNKLQ 92
Db 61 RKPGVLLITVKNRDICADPRQVWVKLLHLKLS 92

RESULT 3
SY18_HUMAN
ID SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CC118) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;

```

RN [1] SEQUENCE FROM N.A.
 RP Li H., Ruben S.;
 RA "Macrophage inflammatory protein-3 and -4";
 RL Patent number US5504003, 02-APR-1996.
 RN [2]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC TISSUE-Aorta, and Lung;
 RX MEDLINE=97376836; PubMed=9233607;
 RA Hieshima K., Imai T., Baba M., Sakaki Y., Takatsuki K.,
 RA Nakagawa T., Tsurutu J., Takeya M., Sakaki Y., Yoshie O., Nomiya H.,
 RA Miura R., Odenakker G., van Damme J., Yoshie O., Nomiya H.,
 RT "A novel human CC chemokine PARC that is most homologous to
 RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
 RT T lymphocytes, but not for monocytes.";
 RL J. Immunol. 159:1140-1149(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98230488; PubMed=9570561;
 RA Kodellja V., Mueller C., Pollitz O., Hakij N., Orfanos C.E., Goerd S.;
 RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
 RT structural homologue of macrophage inflammatory protein-1 alpha with
 RT a Th2-associated expression pattern.";
 RL J. Immunol. 160:1411-1418(1998).
 RN [4]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE=97275308; PubMed=9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and characterization
 RT of novel chemokines using the WorldWideWeb and expressed sequence tag
 RT databases.";
 RL J. Leukoc. Biol. 61:545-550(1997).
 RN [5]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
 RC TISSUE-Dendritic cell;
 RX MEDLINE=97336102; PubMed=9192897;
 RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
 RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
 RA Figdor C.G.;
 RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
 RT naive T cells.";
 RL Nature 387:713-717(1997).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99168908; PubMed=10049593;
 RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
 RA Hughes A.L., Nomiya H.;
 RT "Chemokine PARC gene (SCYA18) generated by fusion of two
 RT MIP-1alpha/LD78alpha-like genes.";
 RL Genomics 55:353-357(1999).
 RN [7]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RX MEDLINE=99189237; PubMed=10087196;
 RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
 RA Neote K., McCall S.R.;
 RT "Genomic organization and biological characterization of the novel
 RT human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18.";
 RL Genomics 56:296-302(1999).
 RN [8]
 RP SEQUENCE FROM N.A.
 RA Pollitz O., Kodellja V., Guillot P., Orfanos C.E., Goerd S.;
 RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
 RT within the first intron sequence.";
 RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
 CC -|- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
 CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
 CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
 CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES.
 CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
 CC AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -|- SUBCELLULAR LOCATION: Secreted.
 CC -|- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,
 CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -|- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOID
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
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 CC -----
 DR EMBL; AB000221; BAA21670.1; -
 DR EMBL; Y13710; CAA74039.1; -
 DR EMBL; AB012113; BAA34368.1; -
 DR EMBL; AF082214; AAC32287.1; -
 DR EMBL; AF082212; AAC32287.1; JOINED.
 DR EMBL; AF082213; AAC32287.1; JOINED.
 DR EMBL; AF111198; AAD30390.1; -
 DR HSSP; P13236; IHUM.
 DR Genew; HGNC:10616; SCYA18.
 DR MIM; 603757; -
 DR InterPro; IPR000827; CC_Chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCF; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 20
 FT CHAIN 21 89 SMALL INDUCIBLE CYTOKINE A18.
 FT DISULFID 30 54 BY SIMILARITY.
 FT DISULFID 31 70 BY SIMILARITY.
 SQ SEQUENCE 89 AA; 9849 MW; C287B94B9C0518E4 CRC64;
 Query Match 30.3%; Score 139; DB 1; Length 89;
 Best Local Similarity 38.0%; Pred. No. 7.6e-10;
 Matches 30; Conservative 13; Mismatches 30; Indels 6; Gaps 2;
 QY 1 MARLQATALLVLLVLLAVALQATEAGPYGANNEDSVCCRDYVRYRLPLXVYHFXWTSQSC 60
 Db 1 MKGLAAALLVLTCTALC-----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
 QY 61 PRPGVLLTFRDKKICADP 79
 Db 55 PRPGVILLTKRGRQICADP 73
 RESULT 4
 SY04_CHICK
 ID SY04_CHICK STANDARD; PRT; 90 AA.
 AC Q90826; Q910C9;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 15-JUN-2002 (Rel. 41, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
 DE protein 1-beta homolog).
 GN SCYA4.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.

RC TISSUE-Bone marrow;
RX MEDLINE=95369710; PubMed=7642115;
RA Petrenko O., Ischenko I., Enrietto P.J.;
RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
RL mammalian macrophage inflammatory protein-1 beta.";
RL Gene 160:305-306(1995).
RN [2]
RP SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE OF 14-90 FROM N.A.
RA Petrenko O., Enrietto P.J.;
RL Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
CC (BY SIMILARITY).
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; L34553; AAA48747.1; -;
DR EMBL; AJ243034; CAB45103.1; -;
DR HSSP; P13236; 1HUM.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 21
FT CHAIN 22 90
FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
FT DISULFID 32 56
FT DISULFID 33 72 BY SIMILARITY.
FT CONFLICT 87 87 M -> L (IN REF. 1).
FT CONFLICT 87 87 M -> L (IN REF. 1).
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;

Query Match 28.5%; Score 130.5; DB 1; Length 90;
Best Local Similarity 33.7%; Pred. No. 8e-09;
Matches 30; Conservative 18; Mismatches 38; Indels 3; Gaps 3;
QY 3 RLQATLLVLLVALQATGAGPYGANMEDSVCCRDYVRYRLPLXVYVHXFWTSQCPH 62
Db 2 KVSVAALAVL-LIAICYQ-TSAPVGSPPPTS-CCFTIISRLQFPFVADYVETNSQCPH 58
QY 63 PGVLLTFRDXKICADRPVXXKMTLNKL 91
Db 59 AGVPEITRKGREVCANPNDWVQDYNNKM 87

RESULT 5
SY03_RAT STANDARD; PRT; 92 AA.
AC P50229;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
DE protein 1-alpha) (MIP-1-alpha).
GN SCYA3 OR MIP1A.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RA STRAIN=CD-1; TISSUE=Lung;
RX MEDLINE=95298037; PubMed=7779098;
RA Shi M.M., Godleski J.J., Paulauskis J.D.;
RT "Molecular cloning and posttranscriptional regulation of macrophage
RL inflammatory protein-1 alpha in alveolar macrophages.";
RL Biochem. Biophys. Res. Commun. 211:289-295(1995).
RN [2]
RP SEQUENCE FROM N.A.
RA STRAIN=Long Evans; TISSUE=Lung;
RX MEDLINE=95238980; PubMed=7722328;
RA Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.;
RT "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
RL acute lung injury in rats.";
RL J. Immunol. 154:4793-4802(1995).
RN [3]
RP SEQUENCE OF 24-57.
RC STRAIN=Wistar;
RX MEDLINE=96183056; PubMed=8607872;
RA Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
RT "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
RT member of rat GRO/CINC, is a predominant chemokine produced by
RL lipopolysaccharide-stimulated rat macrophages in culture.";
RL Biochem. Biophys. Res. Commun. 220:945-948(1996).
CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
CC BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA AND
CC PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
CC MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
CC PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
CC ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFUX. THIS PROTEIN
CC BINDS HEPARIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U22414; AAA80608.1; -;
DR EMBL; U06435; AAA96498.1; -;
DR HSSP; P13236; 1HUM.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
FT SIGNAL 1 23
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
FT DISULFID 34 57 BY SIMILARITY.
FT DISULFID 35 73 BY SIMILARITY.
FT CONFLICT 6 6 A -> T (IN REF. 2).
FT CONFLICT 57 57 C -> W (IN REF. 2 AND 3).
SQ SEQUENCE 92 AA; 10335 MW; 14E861G647F9A2EB CRC64;

Query Match 28.4%; Score 130; DB 1; Length 92;
Best Local Similarity 35.9%; Pred. No. 9.3e-09;
Matches 28; Conservative 15; Mismatches 33; Indels 2; Gaps 2;
QY 3 RLQATLLVLLVALQATGAGPYGANMEDSVCCRDYVRYRLPLXVYVHXFWTSQCPH 62
Db 2 KVSVAALAVL-LIAICYQ-TSAPVGSPPPTS-CCFTIISRLQFPFVADYVETNSQCPH 58
QY 63 PGVLLTFRDXKICADRPVXXKMTLNKL 91
Db 59 AGVPEITRKGREVCANPNDWVQDYNNKM 87

RESULT 5
SY03_RAT STANDARD; PRT; 92 AA.
AC P50229;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
DE protein 1-alpha) (MIP-1-alpha).
GN SCYA3 OR MIP1A.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta) (T cell-specific protein p28) (TCP228).
GN SCYA5.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=88285659; PubMed=2456327;
RA Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C.,
RA Davis M.M., Krensky A.M.;
RT "A human T cell-specific molecule is a member of a new gene family.";
RL J. Immunol. 141:1018-1025(1988).
RN [2]
RP SEQUENCE FROM N.A.
RA Jang J.S., Kim B.E.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=99228475; PubMed=10213461;
RA Nomiya H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MIP-1, HCC-2, LEC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
RN [4]
RP SEQUENCE FROM N.A.
RA Zeng Q.P., Yang R.Y., Fu L.C.;
RT "The complete sequence of human beta-chemokine RANTES mRNA.";
RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE OF 49-56; 71-79 AND 83-91, AND FUNCTION.
RX MEDLINE=96106406; PubMed=8525373;
RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
RA Lusso P.;
RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
RT HIV-suppressive factors produced by CD8+ T cells.";
RL Science 270:1811-1815(1995).
RN [7]
RP STRUCTURE BY NMR.
RX MEDLINE=95352612; PubMed=7542919;
RA Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;
RT "The three-dimensional solution structure of RANTES.";
RL Biochemistry 34:9307-9314(1995).
RN [8]
RP STRUCTURE BY NMR.
RX MEDLINE=95244456; PubMed=7537088;
RA Skelton N.J., Aspiras F., Ogez J., Schall T.J.;
RT "Proton NMR assignments and solution conformation of RANTES, a
RT chemokine of the C-C type.";
RL Biochemistry 34:5329-5342(1995).
RN [9]
RP SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
RX MEDLINE=99111238; PubMed=9889151;
RA Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
RA Picard L., Wlodawer A., Lubkowski J., Kent S.B.;
RT "Total chemical synthesis and high-resolution crystal structure of
RT the potent anti-HIV protein AOP-RANTES.";
RL Chem. Biol. 6:43-51(1999).
RN [10]
RP X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
RA Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C.,
RA Lubkowski J.;
RT "The crystal structure of Met-RANTES: comparison with native RANTES
RT and AOP-RANTES.";
RL Protein Pept. Lett. 7:73-82(2000).
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER

CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCRL1, CCR3, CCR4 AND
CC CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T
CC CELLS. RECOMBINANT RANTES PROTEIN INDUCES A DOSE-DEPENDENT
CC INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN
CC IMMUNODEFICIENCY VIRUS (SIV).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- INDUCTION: BY MITOGENS.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC
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CC
CC EMBL; M21121; AAA36725.1; -
DR EMBL; AF043341; AAC03541.1; -
DR EMBL; AF088219; AAC63331.1; -
DR EMBL; AF286753; AAF73070.1; -
DR EMBL; BC008600; AAH08600.1; -
DR PIR; A28815; A28815.
DR PDB; 1HRJ; 14-OCT-96.
DR PDB; 1FTN; 03-JUN-95.
DR PDB; 1RTO; 03-JUN-95.
DR PDB; 1B3A; 23-APR-99.
DR PDB; 1BQT; 19-APR-00.
DR Gene; HGNC:10632; SCYA5.
DR MIM; 187011; -
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;
KW 3D-structure.
FT SIGNAL 1 23
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57
FT DISULFID 34 73
FT CONFLICT 7 7 A -> R (IN REF. 1 AND 4).
FT CONFLICT 14 14 A -> V (IN REF. 4).
SQ SEQUENCE 91 AA; 9990 MW; F80BFAF9A87C620F CRC64;
Query Match 26.5%; Score 121.5; DB 1; Length 91;
Best Local Similarity 29.9%; Pred. NO. 9.6e-08;
Matches 26; Conservative 20; Mismatches 38; Indels 3; Gaps 2;
QY 6 TALLVVLVLLAVALQA-TEAGPYGNMEDSVCCRDYVRYRLPLXVXHFWXTSDSCPRPG 64
DB 4 SAALAVILIALCALCAPASAPSYSS--DTTPCCFAYIARPLPRAHIKEFYFTSGKSNPA 61
QY 65 VVLTFRDKXICADPRVEXXKMLNKL 91
DB 62 VVFVTRKNRQVCANPEKKWREYINSL 88
RESULT 8
SY14_HUMAN
ID SY14_HUMAN STANDARD; PRT; 93 AA.
AC O16627; O13954;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
DE (HCC-1/HCC-3) (NCC-2).
GN SCYA14 OR NCC2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.

NCBI_TaxID=9606;

[1] SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.

RP TISSUE=Bone marrow;

RX MEDLINE=96136773; PubMed=8551235;

RA Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,

RA Kubies M., Tomczkowski J., Kirchhoff K., Raida M., Adermann K.,

RA Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,

RA Baggiolini M., Forssmann W.-G.,

RT "HCC-1, a novel chemokine from human plasma";

RL J. Exp. Med. 183:295-299(1996).

[2] SEQUENCE FROM N.A.

RP TISSUE=Liver;

RX MEDLINE=98263352; PubMed=9600961;

RA Pardigol A., Forssmann W., Zucht H.-D., Loetscher P.,

RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;

RT "HCC-2, a human chemokine: gene structure, expression pattern, and

RT biological activity";

RL Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).

[3] SEQUENCE FROM N.A.

RX MEDLINE=99228475; PubMed=10213461;

RA Nomiya H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;

RA "Organization of the chemokine gene cluster on human chromosome

RT 17q11.2 containing the genes for CC chemokine MIP-1, HCC-2, LEC, and

RT RANTES";

RL J. Interferon Cytokine Res. 19:227-234(1999).

CC -1- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA

CC RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED

CC INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,

CC AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T

CC LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE

CC PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.

CC -1- SUBCELLULAR LOCATION: Secreted.

CC -1- ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;

CC ARE PRODUCED BY ALTERNATIVE SPLICING.

CC -1- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL

CC TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE

CC MARROW. PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.

CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE

CC C-C) (CHEMOKINE CC).

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EMBL; 249270; CA89264.1; -

DR EMBL; 270292; CA94307.1; -

DR EMBL; 270293; CA94309.1; -

DR EMBL; 249269; CA89263.1; -

DR EMBL; AF088219; AAC63329.1; -

DR EMBL; AF088219; AAF23982.1; -

DR HSP; P13236; HUM.

DR Genew; HGNC:10612; SCYA14.

DR MIM; 601392; -

DR InterPro; IPR000827; CC_chemkine_sml.

DR InterPro; IPR001811; Chemokine_IL8.

DR Pfam; PF00048; IL8; 1.

DR SMART; SM00199; SCY; 1.

DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

KW Cytokine; Signal; Alternative splicing.

FT SIGNAL 1 19

FT CHAIN 20 93 SMALL INDUCIBLE CYTOKINE A14.

FT DISULFID 35 59 BY SIMILARITY.

FT DISULFID 36 75 BY SIMILARITY.

FT VARSPPLIC 27 27

R -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC-

3).

SQ SEQUENCE 93 AA; 10678 MW; DDB899DC9148836 CRC64;

Query Match 26.0%; Score 119; DB 1; Length 93;

Best Local Similarity 27.2%; Pred. No. 2e-07; 32; Indels 8; Gaps 2;

Matches 22; Conservative 19; Mismatches 32;

Qy 3 RLOATALLVLLVLAVAL---QATEAGPYGANMEDSVCCRDYVRYRLPLXVXHFXTSD 58

Db 2 KISVAAPFFLLITIALGTKESSRGPY---HPSECCFTYTKIPQRIMDYETNS 57

Qy 59 SCPRPGVLLFFRKXICADP 79

Db 58 QCSKPGIVFITKRGHSVCTNP 78

RESULT 9

ID SY05_MOUSE STANDARD; PRT; 91 AA.

AC P30882;

DT 01-JUL-1993 (Rel. 26, Created)

DT 01-JUN-1994 (Rel. 29, Last sequence update)

DT 15-JUN-2002 (Rel. 41, Last annotation update)

DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES

DE protein) (SIS-delta) (MuRantes).

GN SCYA5.

OS Mus musculus (Mouse).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

OX NCBI_TaxID=10090;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=92277990; PubMed=1375672;

RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,

RA Krensky A.M., Neilson E.G.;

RT "Isolation and characterization of cDNA from renal tubular epithelium

RT encoding murine Rantes";

RL Kidney Int. 41:220-225(1992).

RN [2]

RP SEQUENCE FROM N.A.

RX MEDLINE=92289805; PubMed=1376260;

RA Schall T.J., Simpson N.J., Mak J.Y.;

RT "Molecular cloning and expression of the murine RANTES cytokine:

RT structural and functional conservation between mouse and man.";

RL Eur. J. Immunol. 22:1477-1481(1992).

RN [3]

RP SEQUENCE FROM N.A.

RC STRAIN=NIH Swiss;

RX MEDLINE=94132613; PubMed=7507961;

RA Danoff T.M., Lailey P.A., Chang Y.S., Heeger P.S., Neilson E.G.;

RT "Cloning, genomic organization, and chromosomal localization of the

RT Scya5 gene encoding the murine chemokine Rantes.";

RL J. Immunol. 152:1182-1189(1994).

RN [4]

RP SEQUENCE FROM N.A.

RC STRAIN=BALB/C;

RX MEDLINE=94217689; PubMed=7513046;

RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,

RA Paznekas W.A.;

RT "Definition of a lipopolysaccharide-responsive element in the 5'-

RT flanking regions of Murantes and crg-2.";

RL Mol. Cell. Biol. 14:2914-2925(1994).

RN [5]

RP SEQUENCE FROM N.A.

RC STRAIN=BALB/CJ,B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;

RA Ma R.Z., Teuscher C.;

RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.

CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER

CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM

CC BASOPHILS AND ACTIVATES EOSINOPHILS.

CC -1- SUBCELLULAR LOCATION: Secreted.

CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.

CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE

CC C-C) (CHEMOKINE CC).

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DR EMBL; M7747; AAA40029.1; -
DR EMBL; S37648; AAB22330.1; -
DR EMBL; U02298; AAA18302.1; -
DR EMBL; X70675; CAA50011.1; -
DR EMBL; AF065944; AAC17511.1; -
DR EMBL; AF065945; AAC17512.1; -
DR EMBL; AF065946; AAC17513.1; -
DR EMBL; AF065947; AAC17514.1; -
DR HSP; P13501; IRTN.
DR MGI; 98262; Scya5.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 23 POTENTIAL.
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
FT CONFLICT 19 19 T -> A (IN REF. 2).
FT CONFLICT 41 41 A -> E (IN REF. 1).
SQ SEQUENCE 91 AA; 10071 MW; 5DFD6F4684FE1C8 CRC64;

Query Match 25.5%; Score 117; DB 1; Length 91;
Best Local Similarity 28.1%; Pred. No. 3.3e-07;
Matches 25; Conservative 18; Mismatches 44; Indels 2; Gaps 1;

QY 3 RIQTALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHXFWTSDCPR 62
DB 2 KISAALTIILTAALCTPAPASPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSN 59
QY 63 PGVLLTFRDKXICADPRVXXKMLNKL 91
DB 60 LAVVEVTRNRQVCANPEKKWQVEYINYL 88

RESULT 10
SY05_RAT
ID SY05_RAT STANDARD; PRT; 92 AA.
AC P50231;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).
GN SCYA5.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES. MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

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DR EMBL; U06436; AAA96499.1; -
DR HSP; P13501; IRTN.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10170 MW; B4FBEC2B4208ABC6 CRC64;

Query Match 25.4%; Score 116.5; DB 1; Length 92;
Best Local Similarity 30.0%; Pred. No. 3.8e-07;
Matches 27; Conservative 19; Mismatches 41; Indels 3; Gaps 2;

QY 3 RIQTALLVLLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVHXFWTSDCP 61
DB 2 KISAASLTIVLVAALCTPVPASPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCS 59
QY 62 RGVVLLTFRDKXICADPRVXXKMLNKL 91
DB 60 NLAVVFTVTRNRQVCANPEKKWQVEYINYL 89

RESULT 11
SY04_HUMAN
ID SY04_HUMAN STANDARD; PRT; 92 AA.
AC P13236; P22617; Q13704;
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory protein 1-beta) (MIP-1-beta) (T-cell activation protein 2) (ACT-2) (PAT 744) (H400) (SIS-gamma) (Lymphocyte activation gene-1 protein) (LAG-1) (HC21) (G-26 T lymphocyte-secreted protein).
GN SCYA4 OR MIP1B OR LAG1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=89071764; PubMed=2462251;
RA Lipes M.A., Napolitano M., Jeang K.-T., Chang N.T., Leonard W.J.;
RT "Identification, cloning, and characterization of an immune activation gene."
RL Proc. Natl. Acad. Sci. U.S.A. 85:9704-9708(1988).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=89140347; PubMed=2521882;
RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
RT "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors."
RL J. Immunol. 142:1582-1590(1989).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=89093958; PubMed=2521353;
RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
RT "A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes."

DT 01-MAR-1989 (Rel. 10, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha
 DE protein) (GO/G1 switch regulatory protein 19-1) (GOS19-1 protein)
 DE (SIS-beta) (PAT 464.1).
 GN SCYA3 OR GOS19-1 OR MIP1A.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=86223879; PubMed=3086300;
 RA Obaru K., Fukuda M., Maeda S., Shimada K.;
 RT "A cDNA clone used to study mRNA inducible in human tonsillar
 RT lymphocytes by a tumor promoter";
 RL J. Biochem. 99:885-894(1986).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89140347; PubMed=2521882;
 RA Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
 RT "Mitogenic activation of human T cells induces two closely related
 RT genes which share structural similarities with a new family of
 RT secreted factors";
 RL J. Immunol. 142:1582-1590(1989).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91103879; PubMed=2271120;
 RA Blum S., Forsdyke R.E., Forsdyke D.R.;
 RT "three human homologs of a murine gene encoding an inhibitor of stem
 RT cell proliferation";
 RL DNA Cell Biol. 9:589-602(1990).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=90287155; PubMed=1694014;
 RA Nakao M., Nomiya H., Shimada K.;
 RT "Structures of human genes coding for cytokine LD78 and their
 RT expression";
 RL Mol. Cell. Biol. 10:3646-3658(1990).
 RN [5]
 RP SEQUENCE OF 23-92 FROM N.A.
 RA Jang J.S., Kim B.E.;
 RL Submitted (Jan 1998) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49.
 RX MEDLINE=96127782; PubMed=8541527;
 RA Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S.,
 RA Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H.,
 RA Heyworth C.M., Lord B.I., McCourt M., Varley P.G., Wood L.M.,
 RA Edwards R.M., Lewis P.J.;
 RT "BB-10010: an active variant of human macrophage inflammatory protein-
 RT 1 alpha with improved pharmaceutical properties";
 RL Blood 86:4400-4408(1995).
 RN [7]
 RP SEQUENCE OF 27-40 AND 71-83, AND FUNCTION.
 RX MEDLINE=96106406; PubMed=8525373;
 RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
 RA Lusso P.;
 RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
 RT HIV-suppressive factors produced by CD8+ T cells";
 RL Science 270:1811-1815(1995).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
 CC BINDS TO CCR1, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE
 CC FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES
 CC A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
 CC AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: BY TPA OR PHA (TPA = 12-O-TETRADECANOYL PHORBOL-13
 CC ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
 CC MITOGEN)).
 CC -1- SIMILARITY: BELONGS TO THE INTERCERIN BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC). STRONG, TO SCYA3L1.

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 CC -----
 DR EMBL; D00044; BAA00029.1; -
 DR EMBL; M23452; AAA36316.1; -
 DR EMBL; M25315; AAA57255.1; -
 DR EMBL; X03754; CAA27388.1; -
 DR EMBL; X04018; CAA27643.1; ALT_SEQ.
 DR EMBL; M23178; AAA35858.1; -
 DR EMBL; D90144; BAA14172.1; -
 DR EMBL; AF043339; AAC03539.1; -
 DR PIR; A24198; A24198.
 DR PIR; A30574; A30574.
 DR HSP; P13236; IHUM.
 DR MIM; 182283; -
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 33 57 BY SIMILARITY.
 FT DISULFID 34 73 BY SIMILARITY.
 FT MUTAGEN 49 49 D->A: IN BB-10010; IMPROVED
 FT PHARMACEUTICAL PROPERTIES.
 SQ SEQUENCE 92 AA; 10085 MW; 517865D5D6776CA8 CRC64;
 Query Match 24.9%; Score 114; DB 1; Length 92;
 Best Local Similarity 32.5%; Pred. No. 7.7e-07;
 Matches 26; Conservative 15; Mismatches 31; Indels 8; Gaps 3;
 QY 3 RLOTALLVLLVLLAVALQATEAGPYGNM--EDSVCCRDYVRYRLPLXVXHFXMTSDS 59
 DB 2 QVSTAALAVL-LCTMAL---CNOFSASLAADPTACCFSTSRQIPONFIADYFETSSQ 56
 QY 60 CPRPGVVLLTFRDKXICADP 79
 DB 57 CSKPGVIFLTQRSRQVCADP 76
 RESULT 13
 SY3L_HUMAN
 ID SY3L_HUMAN STANDARD; PRT; 93 AA.
 AC P16619;
 DT 01-AUG-1990 (Rel. 15, Created)
 DT 01-AUG-1990 (Rel. 15, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 like 1 precursor (Tonsillar lymphocyte
 DE LD78 beta protein) (GO/G1 switch regulatory protein 19-2) (GOS19-2
 DE protein) (PAT 464.2).
 DE SCYA3L1 OR GOS19-2.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Blood;
 RX MEDLINE=90287702; PubMed=1972563;
 RA Irving S.G., Zipfel P.F., Balke J., McBride O.W., Morton C.C.,
 RA Burd P.R., Siebenlist U., Kelly K.;
 RT "Two inflammatory mediator cytokine genes are closely linked and
 RT variably amplified on chromosome 17q.";
 RL Nucleic Acids Res. 18:3261-3270(1990).

```

DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta).
DE SCYA5.
GN Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Hystriocognathi; Cavidae; Cavia.
OC NCBI_Taxid=10141;
RN [1]
RN SEQUENCE FROM N.A.
RN STRAIN=Dunkin-Hartley;
RC Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B.,
RA Wells T.N.C., White A.M., Westwick J., Watson M.L.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
[2]
RN SEQUENCE FROM N.A.
RN TISSUE=Lung;
RC Asano K., Nakamura M., Oguma T., Fukunaga K., Ishizaka A.,
RA Yamaguchi K., Kanazawa M.;
RL Submitted (APR-1997) to the EMBL/GenBank/DBJ databases.
CC -! FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -! SUBCELLULAR LOCATION: Secreted.
CC -! SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DE EMBL; U77037; AAC53293.1; -.
DR EMBL; AB002662; BAA19604.1; -.
DR HSP; PI3501; 1RTN.
DR InterPro; IPR000827; CC_chemokine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCF; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
DR Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
KW SIGNAL 1 23 POTENTIAL.
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
SQ SEQUENCE 91 AA; 10088 MW; 7F6A31B751237DB9 CRC64;
Query Match 24.6%; Score 112.5; DB 1; Length 91;
Best Local Similarity 29.4%; Pred. No. 1 le-06;
Matches 25; Conservative 19; Mismatches 38; Indels 3; Gaps 2;
QY 7 ALLWLVLVLAALQATEAGPYGANBEDSVCCRDYRVYRLPLXVXHFWTSDCRPGVY 66
DB || || || || || || || || || || || || || || || || || || || ||
DB 7 ALCVILTAAALCPVAS-ASPYAS--DTTPCCFAYISRALPRTHIKEYFYFTSSKCSNLAVV 63
QY 67 LITFRDXKICADPRVPPXXMIINLKL 91
DB : || :: || :: || :: || :: || :: || :: || :: || :: || :: || ::
DB 64 FVTRKNRQVCANPERKKWREYINSL 88
RESULT 15
SY04_RAT STANDARD; PRT; 92 AA.
ID SY04_RAT
AC P50230;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
DE protein 1-beta) (MIP-1-beta).
GN SCYA4 OR MIP1B.

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Search completed: July 28, 2003, 04:01:12
Job time : 5.88445 secs

Search completed: July 28, 2003, 04:01:12
Job time : 5.88445 secs


```

DB 61 RKPGVLLTVKNRDCAIDPRQVWVKLLHLKLS 92
      :|||||:|:::||||| |::|||
      12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXFHXTWSDSCPRPGVLLTFR 71
      1 LVLLAVALQTSAGPYGANVEDSICCDYIRHPLPRFVKFEFYWTSKCRKPGVLLITIK 60
      72 DKXICADPRVPXXKMILNKLS 92
      61 NRDICADPRMLVWKILHLKLA 81

RESULT 2
Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65;
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1;
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 62.9%; Score 288; DB 11; Length 92;
Best Local Similarity 58.7%; Pred. No. 2.9e-31;
Matches 54; Conservative 16; Mismatches 22; Indels 0; Gaps 0;

QY 1 MARLQATLLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXFHXTWSDSC 60
DB 1 MATLEVPQLVALVLLVLLAVALQTSAGPYGANVEDSICCDYIRHPLPRFVKFEFYWTSKSC 60
      :|||||:|:::||||| |::|||
      61 PRPGVLLTFRDKXICADPRVPXXKMILNKLS 92
      61 RKPGVLLTVKNRDCAIDPRMLVWKILHLKLA 92

RESULT 3
Q90ZU1 PRELIMINARY; PRT; 81 AA.
AC Q90ZU1
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)
DE Macrophage-derived chemokine (Fragment).
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SPRAGUE-DAWLEY; TISSUE=THYMUS;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-0(1999).
DR EMBL; AF163477; AAD55764.1;
DR HSSP; Q98157; ICM9.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR NON_TER 1
SQ SEQUENCE 81 AA; 9212 MW; A0A7EDIA0045D80B CRC64;

Query Match 29.3%; Score 134; DB 11; Length 92;
Best Local Similarity 31.5%; Pred. No. 2.2e-10;
Matches 28; Conservative 20; Mismatches 33; Indels 2; Gaps 2;

QY 3 RLQATLLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVYVXFHXTWSDSCPR 62
DB 2 KVPTAVLAVLCIITLCNQVFSAPYGD-TPTFCFCFSYGR-QIPRKFADIYFTSSLCSE 59
      :|||||:|:::||||| |::|||
      63 PGVLLTFRDKXICADPRVPXXKMILNKL 91
      60 PGIIFLTRNRHVCADPRKWTWQEIITDL 88

RESULT 5
Q9PWA6 PRELIMINARY; PRT; 90 AA.
AC Q9PWA6;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
DE Chemokine.
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.";
RL Submitted (APR-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF146730; AAD48772.1;

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DR HSP; P13236; IHUM.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF000048; IL8; 1.
DR SMART; SM00159; SCX; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ SEQUENCE 90 AA; 9986 MW; 50AF9679A26751CB CRC64;

Query Match      28.7%; Score 131.5; DB 13; Length 90;
Best Local Similarity 33.7%; Pred. No. 4.7e-10;
Matches 30; Conservative 19; Mismatches 37; Indels 3; Gaps 3;

Qy 3 RLOATALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTWSDSCP 62
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 2 KVSVAALAVL-LIAICYQ-TSAAPVGDPPPTS-CCFTYISRLQPSFVADYETNSQC 58
Qy 63 PGVLLTFRDKKXICADPRVXXKMLNKL 91
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 59 AGVVFITRKGEVCANPDNDVQYMNKM 87

RESULT 6
Q910C9 PRELIMINARY; PRT; 90 AA.
AC Q910C9;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1-beta.
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4.";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ243034; CAB45103.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF000048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN.1.
SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;

Query Match      28.5%; Score 130.5; DB 13; Length 90;
Best Local Similarity 33.7%; Pred. No. 6.4e-10;
Matches 30; Conservative 18; Mismatches 38; Indels 3; Gaps 3;

Qy 3 RLOATALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTWSDSCP 62
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 2 KVSVAALAVL-LIAICYQ-TSAAPVGDPPPTS-CCFTYISRLQPSFVADYETNSQC 58
Qy 63 PGVLLTFRDKKXICADPRVXXKMLNKL 91
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 59 AGVVFITRKGEVCANPDNDVQYMNKM 87

RESULT 7
Q8QG57 PRELIMINARY; PRT; 91 AA.
AC Q8QG57;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
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```
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=21655115; PubMed=11797102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
RT chicken CC chemokines.";
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 74A646BB229194EF CRC64;

Query Match      27.9%; Score 128; DB 13; Length 91;
Best Local Similarity 34.4%; Pred. No. 1.4e-09;
Matches 31; Conservative 18; Mismatches 37; Indels 4; Gaps 2;

Qy 4. LQATALLVLLVLLAVALQATEA--GPGANMEDSVCCRDYVRYRLPLXVVXHFXTWSDSCP 61
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 1 MMTAVAVSLSLVLAALFPQASSPFGA--DTTCCFNYSVRKLPQNHHVKDYFTYSSKCP 58
Qy 62 RPYVLLTFRDKKXICADPRVXXKMLNKL 91
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 59 QAAVVFITRKGRQVCANPDARWVKEYINFL 88

RESULT 8
Q91ZLO PRELIMINARY; PRT; 92 AA.
AC Q91ZLO;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletcheva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF000048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN.1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match      27.8%; Score 127.5; DB 11; Length 92;
Best Local Similarity 34.8%; Pred. No. 1.7e-09;
Matches 31; Conservative 13; Mismatches 44; Indels 1; Gaps 1;

Qy 3 RLOATALLVLLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXTWSDSCP 62
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 2 KLCISTLALLLEAEFCAPVTSAPRGSDPPIS-CCFSVASRKLPRNFVTDYETSSLCCK 60
Qy 63 PGVLLTFRDKKXICADPRVXXKMLNKL 91
Dy : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Dy 61 PAVVFLTRKGEVCADPSQPVWVNEYNDL 89

RESULT 9
Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; Q12569;
DT 01-FEB-1997 (TrEMBLrel. 02, Created)
DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
DT 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
```


[illegible]

Search completed: July 28, 2003, 04:02:52
Job time : 18.1933 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 15.2941 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165a-30

Perfect score: 390

Sequence: 1 LGPYGANMEDSVCCRDYRY.....EICADPRVWVRMILNKLQ 70

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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- 2: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*
- 3: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:*
- 4: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*
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- 19: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:*
- 20: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1999.DAT:*
- 21: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:*
- 22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:*
- 23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	390	100.0	70	AAW20060	Human macrophage d
2	390	100.0	70	AAW20060	Macrophage derived
3	390	100.0	70	AAW20060	Human macrophage-d
4	388	99.5	172	AAW20060	Human MDC and huma
5	388	99.5	334	AAW20060	Human MDC and huma
6	388	99.5	567	AAW20060	Human MDC and HIV-
7	386	99.0	69	AAW20060	Human chemokine MD
8	386	99.0	69	AAW20060	Human MDC protein.
9	386	99.0	86	AAW20060	Human chemokine pr
10	386	99.0	93	AAW20060	Macrophage derived

11	386	99.0	93	AAW62783	Amino acid sequenc
12	386	99.0	93	AAW59433	Human chemokine pr
13	386	99.0	93	AAW40811	Macrophage-derived
14	386	99.0	93	AAW26175	Macrophage-derived
15	386	99.0	93	AAW24414	Human macrophage d
16	386	99.0	93	AAW05871	Human macrophage-d
17	386	99.0	93	AAW06829	Macrophage derived
18	386	99.0	93	AAW07500	A human monokine d
19	386	99.0	93	AAW01406	Human macrophage-d
20	386	99.0	154	AAW05878	Yeast pre-pro-alpha
21	381	97.7	93	AAW07604	Cytokine beta-13 s
22	381	97.7	93	AAW57881	Human chemokine be
23	381	97.7	93	AAW68352	Amino acid sequenc
24	380	97.4	68	AAW17668	Stem cell mobilisi
25	377	96.7	93	AAW05879	Human macrophage-d
26	376	96.4	93	AAW05880	Macaque macrophage
27	374	95.9	69	AAW20061	Human macrophage d
28	374	95.9	69	AAW24415	Macrophage derived
29	374	95.9	69	AAW05874	Human macrophage-d
30	362	92.8	69	AAW20062	Human macrophage d
31	362	92.8	69	AAW24416	Macrophage derived
32	362	92.8	69	AAW05875	Human macrophage-d
33	342	87.7	93	AAW20059	Human macrophage d
34	342	87.7	93	AAW24417	Macrophage derived
35	342	87.7	93	AAW05872	Human macrophage-d
36	270	69.2	473	AAW61797	Chimeric chemokine
37	268	68.7	68	AAW61808	Murine MDC mature
38	268	68.7	68	AAW78392	Mouse chemokine mM
39	268	68.7	68	AAW68355	Murine chemokine m
40	268	68.7	92	AAW59434	Mouse chemokine pr
41	268	68.7	92	AAW05876	Mouse macrophage-d
42	265	67.9	81	AAW05877	Rat macrophage-der
43	214.5	55.0	67	AAW78396	Human/mouse hybrid
44	214.5	55.0	67	AAW68359	Chimeric chemokine
45	213	54.6	37	ABB39053	Peptide #6559 enco

ALIGNMENTS

RESULT 1
AAW20060
ID AAW20060 standard; Protein; 70 AA.

XX AC AAW20060;

XX DT 11-SEP-1997 (first entry)

XX Human macrophage derived chemokine analogue.

XX MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
XX rheumatoid arthritis; chemotaxis; fibroblast proliferation;
XX wound healing; angiogenesis; inflammation.

XX Synthetic.

XX OS WO9640923-AL.

XX PN WO9640923-AL.

XX PD 19-DEC-1996.

XX PF 07-JUN-1996; 96WO-US10114.

XX PR 16-NOV-1995; 95US-0558658.

XX PR 07-JUN-1995; 95US-0479620.

XX (ICOS-) ICOS CORP.

XX Godiska R, Gray PW;

XX WPI; 1997-052324/05.

XX Macrophage derived chemokine (MDC) and analogues - used in the

PT treatment of inflammatory diseases, MDC antibodies used to treat

PT Crohn's disease, rheumatoid arthritis, etc.
 XX Claim 25; Page 83; 106pp; English.
 XX A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and its analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and its analogues also induce fibroblast proliferation having a positive effect in wound healing and in the angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.

XX SQ Sequence 70 AA;
 Query Match 100.0%; Score 390; DB 18; Length 70;
 Best Local Similarity 100.0%; Pred. No. 3e-41;
 Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 DB 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 QY 61 VKMILNKLQ 70
 DB 61 VKMILNKLQ 70

RESULT 2
 AAY24413
 ID AAY24413 standard; peptide; 70 AA.
 XX AC AAY24413;
 XX 24-SEP-1999 (first entry)
 XX Macrophage derived chemokine analogue MDC (n+1).
 XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX Homo sapiens.
 OS Synthetic.
 XX US5932703-A.
 XX 03-AUG-1999.
 XX 07-JUN-1996; 96US-0660542.
 XX 07-JUN-1996; 96US-0660542.
 PR 07-JUN-1995; 95US-0479620.
 PR 16-NOV-1995; 95US-0558658.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 PI WPI; 1999-443621/37.
 XX Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 XX Claim 1; Column 59; 43pp; English.
 XX The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. The MDC analogue is capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogue may be used to modulate

CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX SQ Sequence 70 AA;
 Query Match 100.0%; Score 390; DB 20; Length 70;
 Best Local Similarity 100.0%; Pred. No. 3e-41;
 Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 DB 1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
 QY 61 VKMILNKLQ 70
 DB 61 VKMILNKLQ 70

RESULT 3
 AAY05873
 ID AAY05873 standard; Protein; 70 AA.
 XX AC AAY05873;
 XX 02-AUG-1999 (first entry)
 XX Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
 DE MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine.
 XX Homo sapiens.
 OS Synthetic.
 XX WO9915666-A2.
 XX 01-APR-1999.
 XX 28-SEP-1998; 98WO-US20270.
 XX 28-APR-1998; 98US-0067447.
 PR 26-SEP-1997; 97US-0939107.
 XX (ICOS-) ICOS CORP.
 XX Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 PI WPI; 1999-254715/21.
 XX Vertebrate Macrophage Derived Chemokines, analogues and antagonists
 PT Example 11; Page 134; 147pp; English.
 XX The present sequence represents synthetic analogue MDC(n+1) of the
 CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).
 CC MDC(n+1) consists of a Leu residue following by amino acid residues
 CC 1-69 of the MDC mature polypeptide. The analogue is expected to be
 CC an antagonist of MDC activity, inhibiting activity by competitively
 CC binding to the receptor that recognises MDC or by forming inactive
 CC heterodimers with MDC. MDC antagonists are used in claimed methods
 CC for the preparation of medicaments for the suppression of the
 CC proliferation of a mammalian immunodeficiency virus, for inhibiting
 CC platelet aggregation in a mammal, for the treatment or palliation
 CC of lupus erythematosus in a mammal, for inhibiting MDC-induced
 CC activation, chemotaxis or proliferation of cells that express CCR4,
 CC for inhibiting or palliating an allergic reaction in a mammal, and
 CC for treating asthma.

```

XX SQ Sequence 70 AA;
Query Match 100.0%; Score 390; DB 20; Length 70;
Best Local Similarity 100.0%; Pred. No. 3e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPW 60
:|||||
DB 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPW 60
:|||||

QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70
:|||||

RESULT 4
AAY29895
ID AAY29895 standard; Protein; 172 AA.
XX
AC AAY29895;
XX
DT 17-NOV-1999 (first entry)
XX Human MDC and human Muc-1 fusion protein.
DE Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine;
KW Immune response; HIV; infection.
XX Homo sapiens.
OS Synthetic.
XX WO9946392-A1.
XX
PN 16-SEP-1999.
XX
PD 12-MAR-1999; 99WO-US05345.
XX
PF 12-MAR-1998; 98US-0077745.
XX
PR (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX Kwak LW, Biragyn A;
XX WPI; 1999-551418/46.
XX
PT New fusion polypeptides comprising a chemokine and a tumour antigen or
PT HIV antigen, used for treating cancers or treating or preventing HIV
PT infection -
XX
PS Claim 11; Page 129-130; 142pp; English.
XX
CC The present invention describes fusion proteins comprising a chemokine
CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins
CC comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human
CC Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1;
CC (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human
CC SDF-1 and human Muc-1; (5) human IP-10 and HIV gp120; (6) human MCP-3 and
CC HIV gp120; (7) human MDC and HIV gp120; and (8) human SDF-1 and HIV
CC gp120. The fusion proteins, and nucleotide sequences encoding them, can
CC be used for producing an immune response, e.g. an effector T cell immune
CC response. They can also be used for treating cancer or treating or
CC preventing HIV infection. The fusion proteins and/or nucleotide sequences
CC can be used in in vitro diagnostic assays, as well as in screening assays
CC for identifying unknown tumour antigen epitopes and fine mapping of
CC tumour antigen epitopes. The present sequence represents a specifically
CC claimed fusion protein from the present invention.
XX
SQ Sequence 172 AA;
Query Match 99.5%; Score 388; DB 20; Length 172;
Best Local Similarity 98.6%; Pred. No. 1.4e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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```

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPW 60
:|||||
DB 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPW 60
:|||||

QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70
:|||||

RESULT 5
AAY29904
ID AAY29904 standard; Protein; 334 AA.
XX
AC AAY29904;
XX
DT 17-NOV-1999 (first entry)
XX Human MDC and human scFV fusion protein.
DE Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine;
KW Immune response; HIV; infection.
XX Homo sapiens.
OS Synthetic.
XX WO9946392-A1.
XX
PN 16-SEP-1999.
XX
PD 12-MAR-1999; 99WO-US05345.
XX
PF 12-MAR-1998; 98US-0077745.
XX
PR (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX Kwak LW, Biragyn A;
XX WPI; 1999-551418/46.
XX
PT New fusion polypeptides comprising a chemokine and a tumour antigen or
PT HIV antigen, used for treating cancers or treating or preventing HIV
PT infection -
XX
PS Claim 73; Page 134-135; 142pp; English.
XX
CC The present invention describes fusion proteins comprising a chemokine
CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins
CC comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human
CC Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1;
CC (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human
CC SDF-1 and human Muc-1; (5) human IP-10 and HIV gp120; (6) human MCP-3 and
CC HIV gp120; (7) human MDC and HIV gp120; and (8) human SDF-1 and HIV
CC gp120. The fusion proteins, and nucleotide sequences encoding them, can
CC be used for producing an immune response, e.g. an effector T cell immune
CC response. They can also be used for treating cancer or treating or
CC preventing HIV infection. The fusion proteins and/or nucleotide sequences
CC can be used in in vitro diagnostic assays, as well as in screening assays
CC for identifying unknown tumour antigen epitopes and fine mapping of
CC tumour antigen epitopes. The present sequence represents a specifically
CC claimed fusion protein from the present invention.
XX
SQ Sequence 334 AA;
Query Match 99.5%; Score 388; DB 20; Length 334;
Best Local Similarity 98.6%; Pred. No. 2.9e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPW 60
:|||||
DB 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPW 60
:|||||

QY 61 VKMILNKLQ 70
:|||||

```

```

Db      61 VKMLNKLQSQ 70
|||||
RESULT 6
AA29900
ID      AAY29900 standard; Protein; 587 AA.
XX
AC      AAY29900;
XX
DT      17-NOV-1999 (first entry)
XX
DE      Human MDC and HIV-1 gp120 fusion protein.
XX
KW      Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine;
KW      immune response; HIV; infection.
XX
OS      Homo sapiens.
OS      Human Immunodeficiency virus type 1.
OS      Synthetic.
XX
PN      WO9946392-A1.
XX
PD      16-SEP-1999.
XX
PF      12-MAR-1999; 99WO-US05345.
XX
PR      12-MAR-1998; 98US-0077745.
XX
PA      (USSS ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI      Kwak LW, Biragyn A;
XX
DR      WPI; 1999-551418/46.
XX
PT      New fusion polypeptides comprising a chemokine and a tumour antigen or
PT      HIV antigen, used for treating cancers or treating or preventing HIV
PT      infection -
XX
PS      Claim 50; Page 130-131; 142pp; English.
XX
CC      The present invention describes fusion proteins comprising a chemokine
CC      and a tumour antigen or HIV antigen. Specifically claimed fusion proteins
CC      comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human
CC      Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1;
CC      (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human
CC      SDF-1 and human Muc-1; (5) human IP-10 and HIV gp120; (6) human MCP-3 and
CC      HIV gp120; (7) human MDC and HIV gp120; and (8) human SDF-1 and HIV
CC      gp120. The fusion proteins, and nucleotide sequences encoding them, can
CC      be used for producing an immune response, e.g. an effector T cell immune
CC      response. They can also be used for treating cancer or treating or
CC      preventing HIV infection. The fusion proteins and/or nucleotide sequences
CC      can be used in in vitro diagnostic assays, as well as in screening assays
CC      for identifying unknown tumour antigen epitopes and fine mapping of
CC      tumour antigen epitopes. The present sequence represents a specifically
CC      claimed fusion protein from the present invention.
XX
SQ      Sequence 587 AA;
Query Match 99.5%; Score 388; DB 20; Length 587;
Best Local Similarity 98.6%; Pred. No. 5.4e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY      1 LGPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPW 60
Db      1 MGYPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPW 60
QY      61 VKMLNKLQSQ 70
Db      61 VKMLNKLQSQ 70
|||||
RESULT 7
AA20022
ID      AAO20022 standard; protein; 69 AA.
XX
AC      AAO20022;
XX
DT      11-JUN-2002 (first entry)
XX
DE      Human chemokine MDC protein.
XX
KW      Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic;
KW      antiarteriosclerotic; dermatological; antiinflammatory; antiallergic;
KW      immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV;
KW      AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis;
KW      atheroma; atherosclerosis; organ transplant rejection; MDC.
XX
OS      Homo sapiens.
XX
PN      WO200204015-A1.
XX
PD      17-JAN-2002.
XX
PF      12-JUL-2001; 2001WO-US21933.
XX
PR      12-JUL-2000; 2000US-217683P.
XX
PA      (GRYP-) GRYPHON SCI.
XX
PI      Kochendoerfer G, Botti P, Bradburne JA, Chen S, Cressman S;
XX
DR      WPI; 2002-268857/31.
XX
PT      New polymer-modified bioactive synthetic chemokines useful in the
PT      treatment of various diseases or disorders e.g. asthma -
XX
PS      Disclosure; Fig 10C; 176pp; English.
XX
CC      The invention relates to polymer-modified bioactive synthetic chemokines
CC      and to methods for their production and use. The compounds and methods of
CC      the backbone of the invention are useful in the analysis and treatment of
CC      various diseases states e.g. HIV and AIDS related disorders, asthma,
CC      allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ
CC      transplant rejection, and rheumatoid arthritis. This sequence represents
CC      the human chemokine MDC protein of the invention.
XX
SQ      Sequence 69 AA;
Query Match 99.0%; Score 386; DB 23; Length 69;
Best Local Similarity 100.0%; Pred. No. 9.2e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPW 61
Db      1 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPW 60
QY      62 KMLNKLQSQ 70
Db      61 KMLNKLQSQ 69
|||||
RESULT 8
AAO14155
ID      AAO14155 standard; protein; 69 AA.
XX
AC      AAO14155;
XX
DT      25-APR-2002 (first entry)
XX
DE      Human MDC protein.
XX
KW      Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
KW      asthma; allergic rhinitis; atopic dermatitis; atheroma; antiinflammatory;
KW      antiasthmatic; antiallergic; dermatological; antiarteriosclerotic;
KW      antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;

```


KW atherosclerosis; organ transplant rejection; rheumatoid arthritis.
XX Homo sapiens.
XX OS
XX PN WO200204499-A1.
XX PD 17-JAN-2002.
XX 12-JUL-2001; 2001WO-US21934.
XX 12-JUL-2000; 2000US-217683P.
XX (GRYP-) GRYPHON SCI.
XX Offord R, Gaertner H, Hartley O;
XX WPI; 2002-171703/22.
XX Chemokine receptor modulator useful for treating e.g. asthma, allergic
PT rhinitis comprises a chemically modified carboxyl-terminus and/or amino
PT terminus analogs.
XX Example 3; Fig 2; 86pp; English.
XX The present invention relates to chemokine receptor modulators, which
CC comprise a chemokine polypeptide chain modified at N-terminus with an
CC aliphatic chain and at least one amino acid derivatives and/or modified
CC at its C-terminus with an aliphatic chain or polycyclic. The modulators
CC can be used to treat diseases such as HIV infection, AIDS, asthma,
CC allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ
CC transplant rejection and rheumatoid arthritis. The present sequence is
CC the human MDC protein.
XX Sequence 69 AA;
SQ Query Match 99.0%; Score 386; DB 23; Length 69;
Best Local Similarity 100.0%; Pred. NO. 9.2e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETCADPRVPWV 61
DB 1 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETCADPRVPWV 60
QY 62: KMILNKLSQ 70
DB 61 KMILNKLSQ 69
RESULT 9
AAW59432
ID AAW59432 standard; Protein; 86 AA.
XX AC AAW59432;
XX 27-AUG-1998 (first entry)
XX Human chemokine protein 331D5 from CD1a+ cDNA library.
XX Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
KW degenerative condition; abnormal proliferation; regeneration;
KW degeneration; atrophy.
XX Homo sapiens.
XX Key Location/Qualifiers
FT Peptide 1..15
FT /label= signal
FT /note= "partial signal sequence"
FT Protein 16..86
FT /label= chemokine protein 331D5
XX WO9811226-A2.
XX

PD 19-MAR-1998.
XX 09-SEP-1997; 97WO-US15315.
XX 10-SEP-1996; 96US-0025724.
XX (SCHE) SCHERING CORP.
XX Gorman DM, Hedrick JA, Zlotnik A;
XX WPI; 1998-207387/18.
XX N-PSDB; AAV34996.
XX Mammalian CC and CXC chemokines - useful for treatment of, e.g.
PT cancer and degenerative conditions
XX Disclosure; Page 75; 82pp; English.
XX This sequence represents a novel human chemokine protein, 331D5 which has
CC been isolated from a 90 per cent cDNA library and obtained by
CC random sequencing. Nucleic acid sequences encoding the chemokines can be
CC used for detection, in e.g. forensic techniques. Antibodies and other
CC binding agents may be used in diagnostics. The chemokines themselves are
CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
CC proliferation, regeneration, degeneration or atrophy may be treated by
CC the inventive compositions.
SQ Sequence 86 AA;
Query Match 99.0%; Score 386; DB 19; Length 86;
Best Local Similarity 100.0%; Pred. NO. 1.2e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETCADPRVPWV 61
DB 18 GPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKETCADPRVPWV 77
QY 62 KMILNKLSQ 70
DB 78 KMILNKLSQ 86
RESULT 10
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX AC AAW20058;
XX 11-SEP-1997 (first entry)
XX Macrophage derived chemokine for treating inflammation.
XX MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX Homo sapiens.
XX Key Location/Qualifiers
FT Peptide 1..24
FT /label= sig_peptide
FT Protein 25..93
FT /label= mat_protein
XX WO9640923-A1.
XX 19-DEC-1996.
XX 07-JUN-1996; 96WO-US10114.
XX 16-NOV-1995; 95US-0558658.
XX 07-JUN-1995; 95US-0479620.
XX

PA (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 PT Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated, MDC and it's
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and it's analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 99.0%; Score 386; DB 18; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 84
 QY 62 KMILNKLQ 70
 DB 85 KMILNKLQ 93
 RESULT 11
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 AC AAW62783;
 DT 24-SEP-1998 (first entry)
 XX Amino acid sequence of human STCP-1.
 XX Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX Homo sapiens.
 OS WO9824907-A1.
 PN 11-JUN-1998.
 PD 26-NOV-1997; 97WO-US21552.
 XX 03-DEC-1996; 96US-0760127.
 PR (AMGE-) AMGEN INC.
 PA Andrew DP; Chang M;
 XX WPI; 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX Human STCP-1 polypeptides with chemokine activity - useful e.g. to

PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells
 XX Claim 1; Fig 2A-F; 96pp; English.
 XX
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 SQ Sequence 93 AA;
 Query Match 99.0%; Score 386; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 84
 QY 62 KMILNKLQ 70
 DB 85 KMILNKLQ 93
 RESULT 12
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 AC AAW59433;
 DT 27-AUG-1998 (first entry)
 XX Human chemokine protein 331D5.
 DE Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX Homo sapiens.
 OS WO9811226-A2.
 PN 19-MAR-1998.
 PD 09-SEP-1997; 97WO-US15315.
 XX 10-SEP-1996; 96US-0025724.
 PR (SCHE) SCHERING CORP.
 PA Gorman DM, Hedrick JA, Zlotnik A;
 XX WPI; 1998-207387/18.
 DR N-PSDB; AAV34997.
 XX

PT Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 XX cancer and degenerative conditions
 PS Claim 1; Page 78; 82pp; English.
 CC This sequence represents a novel human chemokine protein, 331D5.
 CC Nucleic acid sequences encoding the chemokines can be used for detection,
 CC in e.g. forensic techniques. Antibodies and other binding agents may be
 CC used in diagnostics. The chemokines themselves are useful for treatment
 CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
 CC regeneration, degeneration or atrophy may be treated by the inventive
 CC compositions.
 XX
 XX
 SQ Sequence 93 AA;
 Query Match 99.0%; Score 386; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 61
 DB 25 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 84
 OY 62 KMILNKLSQ 70
 DB 85 KMILNKLSQ 93
 RESULT 13
 AAW40811
 ID AAW40811 standard; Protein; 93 AA.
 XX
 AC AAW40811;
 XX
 DT 01-APR-1998 (first entry)
 XX
 DE Macrophage-derived chemokine.
 XX
 KW Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
 KW arthritis; inflammatory disorder; cancer; Crohn's disease;
 KW atherosclerosis.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "leader peptide"
 FT Protein 25..93
 FT Protein /note= "mature protein"
 XX
 PN US5688927-A.
 XX
 PD 18-NOV-1997.
 XX
 PF 07-JUN-1995; 95US-0480449.
 XX
 PR 07-JUN-1995; 95US-0480449.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Godiska R, Gray PW;
 XX
 WPI: 1998-008038/01.
 DR N-PSDB; AAT92233.
 XX
 PT Antibodies specific for macrophage-derived chemokine - useful for
 PT purifying or detecting the chemokine or modulating its activity
 XX
 PS Claim 3; Column 21-24; 22pp; English.
 XX
 CC This sequence represents the macrophage-derived chemokine (MDC). This
 CC protein is used to produce the antibodies of the invention. The
 CC antibodies are useful for purifying MDC polypeptides, for detecting

CC endogenous MDC in a host, and for modulating binding of MDC to its
 CC receptors. The DNA encoding this sequence can be used for identifying and
 CC isolating non-human MDC homologues. The MDC protein is potentially useful
 CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
 CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.
 XX
 XX
 SQ Sequence 93 AA;
 Query Match 99.0%; Score 386; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 1.3e-40;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 61
 DB 25 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 84
 OY 62 KMILNKLSQ 70
 DB 85 KMILNKLSQ 93
 RESULT 14
 AAY26175
 ID AAY26175 standard; Protein; 93 AA.
 XX
 AC AAY26175;
 XX
 DT 29-SEP-1999 (first entry)
 XX
 DE Macrophage-derived chemokine.
 XX
 KW Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
 KW humoral response; cell-mediated response; PCR; immunostimulatory;
 KW expression plasmid vector.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT Protein /note= "signal peptide"
 FT Protein 25..93
 FT Protein /note= "mature macrophage-derived chemokine"
 XX
 PN WO9929728-A1.
 XX
 PD 17-JUN-1999.
 XX
 PF 11-DEC-1998; 98WO-US26291.
 XX
 PR 11-DEC-1997; 97US-0069281.
 XX
 PA (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
 XX
 PI Devico AL, Gallo RC, Garzino-Demo A;
 XX
 WPI: 1999-385578/32.
 DR N-PSDB; AAX80630.
 XX
 PT Methods of enhancing vaccine efficacy
 XX
 PS Claim 6; Fig 1A(1)-1A(2); 134pp; English.
 XX
 CC The present sequence is macrophage-derived chemokine. This belongs to
 CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
 CC combining it with one or more chemokines to enhance the immune response
 CC to an antigen. This can be humoral or cell-mediated immune response. The
 CC purified chemokines, fragments, derivatives or analogues are
 CC administered either concurrently with one or more purified antigens
 CC against which an immune response is desired or within a time period
 CC either before or after antigen administration. The chemokine gene is
 CC isolated by PCR, and administered by constructing an expression plasmid
 CC vector which can be expressed in a coordinated manner upon introduction
 CC in a suitable cell. The vaccines are immunostimulatory and can be used

CC to treat microbial diseases especially HIV.

XX Sequence 93 AA;

Query Match 99.0%; Score 386; DB 20; Length 93;

Best Local Similarity 100.0%; Pred. No. 1.3e-40; Mismatches 0; Indels 0; Gaps 0;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNEDSVCCRDYVRYELPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPWV 61

Db 25 GPYGANNEDSVCCRDYVRYELPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

QY 62 KMILNKLSQ 70

Db 85 KMILNKLSQ 93

RESULT 15

AAV24414

ID AAY24414 standard; Protein; 93 AA.

XX AC AAY24414;

XX XX 24-SEP-1999 (first entry)

DT XX Human macrophage derived chemokine.

DE XX

XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
KW inflammation; immune response; inflammatory disorder; Crohn's disease;
KW atherosclerosis; arthritis; pulmonary fibrosis.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT Peptide 1..24

FT Protein /label= signal

FT 25..93

FT /label= MDC

XX US5932703-A.

PN 03-AUG-1999.

XX PD 07-JUN-1996; 96US-0660542.

XX PF 07-JUN-1996; 96US-0660542.

XX PR 07-JUN-1995; 95US-0479620.

PR 16-NOV-1995; 95US-0558658.

XX PA (ICOS-) ICOS CORP.

XX Godiska R, Gray PW;

XX WPI: 1999-443621/37.

DR N-PSDB; AAX90162.

XX Macrophage derived chemokine analogues useful for inhibiting

PT Macrophage derived chemokine-induced chemotaxis

XX Claim 2; Column 41-43; 43pp; English.

XX The present invention describes macrophage derived chemokine (MDC)

CC analogues which are capable of inhibiting MDC induced chemotaxis.

CC Therefore, the MDC analogues may be used to modulate inflammatory and

CC immune responses allowing for the treatment of disorders associated

CC with excessive inflammation or overactive immune responses. Inflammatory

CC disorders which may be treated in this way include Crohn's disease

CC (manifested by chronic inflammation of the bowel), atherosclerosis,

CC arthritis and pulmonary fibrosis. The present sequence represents human

CC MDC.

XX Sequence 93 AA;

XX Sequence 93 AA;

Query Match

Best Local Similarity

Matches 69; Conservative

2 GPYGANNEDSVCCRDYVRYELPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPWV 61

Db 25 GPYGANNEDSVCCRDYVRYELPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

QY 62 KMILNKLSQ 70

Db 85 KMILNKLSQ 93

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SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	390	100.0	70	2	US-08-660-542-30 Sequence 30, Appl
2	386	99.0	93	1	US-08-480-449-2 Sequence 2, Appl
3	386	99.0	93	2	US-08-660-542-2 Sequence 2, Appl
4	386	99.0	93	4	US-09-232-878-6 Sequence 6, Appl
5	386	99.0	93	4	US-08-479-603-2 Sequence 2, Appl
6	386	99.0	93	5	PCT-US95-07294-2 Sequence 2, Appl
7	374	95.9	69	2	US-08-660-542-31 Sequence 31, Appl
8	362	92.8	69	2	US-08-660-542-32 Sequence 32, Appl
9	342	87.7	93	2	US-08-660-542-25 Sequence 25, Appl
10	153	39.2	95	4	US-09-230-637-26 Sequence 26, Appl
11	145	37.2	89	1	US-08-208-339A-4 Sequence 4, Appl
12	145	37.2	89	3	US-08-722-719-6 Sequence 6, Appl
13	143	36.7	70	4	US-09-334-951-65 Sequence 65, Appl
14	143	36.7	89	4	US-09-334-951-6 Sequence 6, Appl
15	141	36.2	78	1	US-08-375-346A-6 Sequence 6, Appl
16	141	36.2	78	2	US-08-467-123B-6 Sequence 6, Appl
17	139.5	35.8	94	4	US-09-230-371A-21 Sequence 21, Appl
18	137	35.1	68	4	US-09-141-833-5 Sequence 5, Appl
19	135	34.6	68	2	US-08-936-387-17 Sequence 17, Appl
20	135	34.6	69	4	US-08-836-922-3 Sequence 3, Appl
21	135	34.6	76	4	US-08-836-922-20 Sequence 20, Appl
22	133	34.1	68	2	US-08-936-387-18 Sequence 18, Appl
23	133	34.1	69	4	US-08-836-922-2 Sequence 2, Appl
24	133	34.1	74	2	US-08-450-905B-18 Sequence 18, Appl
25	131	33.6	67	4	US-09-141-833-2 Sequence 2, Appl
26	131	33.6	68	2	US-08-936-387-1 Sequence 1, Appl
27	131	33.6	68	2	US-08-615-232A-11 Sequence 11, Appl

28	131	33.6	68	3	US-08-470-323-11 Sequence 11, Appl
29	131	33.6	68	4	US-08-836-922-1 Sequence 1, Appl
30	131	33.6	68	4	US-09-141-833-1 Sequence 1, Appl
31	131	33.6	69	3	US-07-982-759F-18 Sequence 18, Appl
32	131	33.6	69	4	US-08-836-922-4 Sequence 4, Appl
33	131	33.6	70	2	US-08-716-188-7 Sequence 7, Appl
34	131	33.6	73	2	US-08-936-387-13 Sequence 13, Appl
35	131	33.6	90	4	US-09-230-637-40 Sequence 40, Appl
36	131	33.6	91	1	US-08-347-492B-12 Sequence 12, Appl
37	131	33.6	91	1	US-08-375-346A-5 Sequence 5, Appl
38	131	33.6	91	1	US-08-480-449-21 Sequence 21, Appl
39	131	33.6	91	2	US-08-633-682-3 Sequence 3, Appl
40	131	33.6	91	2	US-08-421-144A-8 Sequence 8, Appl
41	131	33.6	91	2	US-08-660-542-21 Sequence 21, Appl
42	131	33.6	91	2	US-08-798-143-12 Sequence 12, Appl
43	131	33.6	91	2	US-08-467-123B-5 Sequence 5, Appl
44	131	33.6	91	3	US-08-936-772-3 Sequence 3, Appl
45	131	33.6	91	4	US-08-836-922-14 Sequence 14, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-660-542-30

Query Match 100.0%; Score 390; DB 2; Length 70;

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Best Local Similarity 100.0%; Pred. No. 2.1e-43;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 60
    |||||||
Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 60
    |||||||
QY 61 VKMLNKLSQ 70
    |||||||
Db 61 VKMLNKLSQ 70

RESULT 2
US-08-480-449-2
; Sequence 2, Application US/08480449
; Patent No. 5688927
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE:
; APPLICATION NUMBER: US/08/480,449
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32779
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-480-449-2

Query Match 99.0%; Score 386; DB 1; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 61
    |||||||
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
    |||||||
QY 62 KMLNKLSQ 70
    |||||||
Db 85 KMLNKLSQ 93

RESULT 3
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
```

```
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; APPLICATION NUMBER: US/08/660,542
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-660-542-2

Query Match 99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 61
    |||||||
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
    |||||||
QY 62 KMLNKLSQ 70
    |||||||
Db 85 KMLNKLSQ 93

RESULT 4
US-09-232-878-6
; Sequence 6, Application US/09232878
; Patent No. 6245332
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene
; APPLICANT: Campbell, James
; APPLICANT: Rottman, James
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
; FILE REFERENCE: SUN-110PRV
; CURRENT APPLICATION NUMBER: US/09/232,878
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
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US-09-232-878-6

Query Match 99.0%; Score 386; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 61
|||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 84
|||||

QY 62 KMILNKLSQ 70
|||||
Db 85 KMILNKLSQ 93
|||||

RESULT 5

US-08-479-603-2
; Sequence 2, Application US/08479603
; Patent No. 6320023
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,603
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32780
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-603-2

Query Match 99.0%; Score 386; DB 4; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 61
|||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 84
|||||

QY 62 KMILNKLSQ 70
|||||
Db 85 KMILNKLSQ 93
|||||

RESULT 6

PCT-US95-07294-2
; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:

; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Human Chemokine Beta-13
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068

; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; PCT-US95-07294-2

Query Match 99.0%; Score 386; DB 5; Length 93;
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 61
|||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPWV 84
|||||

QY 62 KMILNKLSQ 70
|||||
Db 85 KMILNKLSQ 93
|||||

RESULT 7

US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-660-542-31

Query Match 95.9%; Score 374; DB 2; Length 69;
Best Local Similarity 97.1%; Pred. No. 2.4e-41;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNEDSVCCRDYVYRLPLRVVKKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
Db 1 GPGANNEDSVCCRDYVYRLPLRVVKKHYWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
Qy 62 KMILNKLSQ 70
Db 61 KMILNKLSQ 69

RESULT 8
US-08-660-542-32
Sequence 32, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-660-542-32
Query Match 92.8%; Score 362; DB 2; Length 69;
Best Local Similarity 94.2%; Pred. No. 8.6e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
Qy 2 GPGANNEDSVCCRDYVYRLPLRVVKKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 61
Db 1 GPGANNEDSVCCRDYVYRLPLRVVKKHYWTSDCPRPGVLLTFRDKKEICADPRVPWV 60
Qy 62 KMILNKLSQ 70
Db 61 KMILNKLSQ 69
RESULT 9
US-08-660-542-25
Sequence 25, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids

Query Match 37.2%; Score 145; DB 1; Length 89;
Best Local Similarity 40.6%; Pred. No. 1.4e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWKMI 64
| | | | | : : : : : | | | | | : : : : : | | :
Db 24 GTNKE--LCCLVYTSWQIPQKFIYDSETSPQCPKPGVLLTFRDKEICADPNKKWKQY 81
QY 65 LNK 68
| | : : |
Db 82 ISDL 85

RESULT 12
US-08-722-719-6
; Sequence 6, Application US/08722719
; Patent No. 6001606
; GENERAL INFORMATION:
; APPLICANT: ROSEN, CRAIG A.
; APPLICANT: RUBIN, STEVEN M.
; APPLICANT: LI, HAODONG
; APPLICANT: ADAMS, MARK D.
; TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
; TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
; FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
; TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-722-719-6

Query Match 37.2%; Score 145; DB 3; Length 89;
Best Local Similarity 40.6%; Pred. No. 1.4e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWKMI 64
| | | | | : : : : : | | | | | : : : : : | | :
Db 24 GTNKE--LCCLVYTSWQIPQKFIYDSETSPQCPKPGVLLTFRDKEICADPNKKWKQY 81
QY 65 LNK 68
| | : : |
Db 82 ISDL 85

RESULT 13
US-09-334-951-65
; Sequence 6, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: RUBEN, STEVEN M.
; APPLICANT: LI, HAODONG
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
; FILE REFERENCE: 1488.033000B
; CURRENT APPLICATION NUMBER: US/09/334,951
; EARLIER FILING DATE: 1999-06-17
; EARLIER FILING DATE: 1994-03-08
; EARLIER FILING DATE: 1995-05-05
; EARLIER FILING DATE: 1995-05-05
; EARLIER FILING DATE: 1995-06-06
; EARLIER FILING DATE: 1995-06-06
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver: 2.0
; SEQ ID NO 65
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-951-65

Query Match 36.7%; Score 143; DB 4; Length 70;
Best Local Similarity 40.6%; Pred. No. 1.9e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
QY 5 GANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWKMI 64
| | | | | : : : : : | | | | | : : : : : | | :
Db 5 GTNKE--LCCLVYTSWQIPQKFIYDSETSPQCPKPGVLLTFRDKEICADPNKKWKQY 62
QY 65 LNK 68
| | : : |
Db 63 ISDL 66

RESULT 14
US-09-334-951-6
; Sequence 6, Application US/09334951
; Patent No. 6451562
; GENERAL INFORMATION:
; APPLICANT: RUBEN, STEVEN M.
; APPLICANT: LI, HAODONG
; TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
; FILE REFERENCE: 1488.033000B
; CURRENT APPLICATION NUMBER: US/09/334,951
; EARLIER FILING DATE: 1999-06-17
; EARLIER FILING DATE: 1994-03-08
; EARLIER FILING DATE: 1995-05-05
; EARLIER FILING DATE: 1995-05-05
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver: 2.0
; SEQ ID NO 65
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-951-6

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; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/468,775
; EARLIER FILING DATE: 1995-06-06
; EARLIER APPLICATION NUMBER: US 08/722,719
; EARLIER FILING DATE: 1996-09-30
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 89
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-334-951-6

Query Match      36.7%; Score 143; DB 4; Length 89;
Best Local Similarity 40.6%; Pred. No. 2.5e-11;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;

QY  5 GANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKETICADPRVPVYKMI 64
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db  24 GTNKE--LCCLVYTSWOIPQKFIVDYSETSPQCPKPGVLLTFRDKETICADPNKKWYQY 81
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QY  65 LNKL 68
Db  82 ISDL 85

RESULT 15
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Seilhamer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; TITLE OF INVENTION: ITS PRODUCTION AND USES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3330 HILLVIEW AVENUE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/375,346A
; FILING DATE: 19-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LUTHER, BARBARA J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0026 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 855-0555
; TELEFAX: (415) 855-0572
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
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; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
US-08-375-346A-6

Query Match      36.2%; Score 141; DB 1; Length 78;
Best Local Similarity 43.1%; Pred. No. 3.9e-11;
Matches 25; Conservative 12; Mismatches 19; Indels 2; Gaps 1;

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Db  22 GTNKE--LCCLVYTSWOIPQKFIVDYSETSPQCPKPGVLLTFRDKETICADPNKKWVQ 77
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Job time : 5.88235 secs
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 9.55882 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165a-30
Perfect score: 390
Sequence: 1 LGPYGANNEDSVCCRDYVRY.....EICADPRVPWVKMILNLSQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 451899 seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA.*
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2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
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10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep1.*
11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep2.*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep3.*
13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
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17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance, to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Match	Score	Length	DB	ID	Description
1	386	99.0	93	10	US-09-837-446-6	Sequence 6, Appli
2	386	99.0	93	11	US-09-811-088-2	Sequence 2, Appli
3	386	99.0	93	15	US-10-314-410-2	Sequence 2, Appli
4	381	97.7	93	10	US-09-908-599-2	Sequence 2, Appli
5	381	97.7	93	10	US-09-908-600-2	Sequence 2, Appli
6	268	68.7	68	15	US-10-001-221A-3	Sequence 3, Appli
7	214.5	55.0	67	15	US-10-001-221A-7	Sequence 7, Appli
8	213	54.6	37	10	US-09-864-761-43730	Sequence 43730, A
9	153	39.2	71	10	US-09-144-838-3	Sequence 3, Appli
10	152	39.0	78	15	US-10-001-221A-6	Sequence 6, Appli
11	145	37.2	69	11	US-09-792-793A-28	Sequence 28, Appli
12	145	37.2	89	10	US-09-334-923A-6	Sequence 6, Appli
13	145	37.2	89	10	US-09-334-954A-6	Sequence 6, Appli
14	145	37.2	97	10	US-09-925-302-792	Sequence 792, App
15	144	36.9	73	10	US-09-144-838-6	Sequence 6, Appli
16	143	36.7	70	10	US-09-334-923A-65	Sequence 65, Appli

17	143	36.7	70	10	US-09-334-954A-65	Sequence 65, Appli
18	141	36.2	78	15	US-10-158-366-6	Sequence 6, Appli
19	138	35.4	89	10	US-09-834-795A-34	Sequence 34, Appli
20	138	35.4	89	12	US-09-834-794A-34	Sequence 34, Appli
21	134	34.4	72	10	US-09-144-838-5	Sequence 5, Appli
22	131	33.6	67	10	US-09-144-838-41	Sequence 41, Appli
23	131	33.6	68	10	US-09-144-838-10	Sequence 10, Appli
24	131	33.6	68	10	US-09-144-838-42	Sequence 42, Appli
25	131	33.6	68	10	US-09-195-457-11	Sequence 11, Appli
26	131	33.6	68	11	US-09-792-793A-29	Sequence 29, Appli
27	131	33.6	91	8	US-08-927-939-21	Sequence 21, Appli
28	131	33.6	91	10	US-09-144-838-9	Sequence 9, Appli
29	131	33.6	91	10	US-09-834-795A-29	Sequence 29, Appli
30	131	33.6	91	12	US-09-834-794A-29	Sequence 29, Appli
31	131	33.6	91	12	US-09-920-137A-8	Sequence 8, Appli
32	131	33.6	91	12	US-09-537-858-1	Sequence 1, Appli
33	131	33.6	91	15	US-10-158-366-5	Sequence 5, Appli
34	131	33.6	91	15	US-10-057-275-8	Sequence 8, Appli
35	131	33.6	91	15	US-10-293-705-12	Sequence 12, Appli
36	129	33.1	66	15	US-10-141-620-19	Sequence 19, Appli
37	129	33.1	69	10	US-09-195-457-9	Sequence 9, Appli
38	129	33.1	70	11	US-09-792-793A-24	Sequence 24, Appli
39	129	33.1	91	15	US-10-153-064-3	Sequence 3, Appli
40	129	33.1	92	8	US-08-927-939-19	Sequence 19, Appli
41	129	33.1	92	10	US-09-151-450-3	Sequence 3, Appli
42	129	33.1	92	10	US-09-908-599-3	Sequence 3, Appli
43	129	33.1	92	10	US-09-334-923A-53	Sequence 53, Appli
44	129	33.1	92	10	US-09-834-795A-33	Sequence 33, Appli
45	129	33.1	92	10	US-09-334-954A-53	Sequence 53, Appli

ALIGNMENTS

RESULT 1

US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James B.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; FILE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 99.0%; Score 386; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 61
Db 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLLTFRDKEICADPRVPW 84
QY 62 KMILNLSQ 70
Db 85 KMILNLSQ 93

RESULT 2

US-09-811-088-2

; Sequence 2, Application US/09811088
; Patent No. US20020160446A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; CURRENT FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match 99.0%; Score 386; DB 11; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
Db 25 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
Qy 62 KMILNKLSQ 70
Db 85 KMILNKLSQ 93

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; TITLE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match 99.0%; Score 386; DB 15; Length 93;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
Db 25 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
Qy 62 KMILNKLSQ 70
Db 85 KMILNKLSQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; FILE REFERENCE: PFI77P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match 97.7%; Score 381; DB 10; Length 93;
Best Local Similarity 98.6%; Pred. No. 3.3e-39;
Matches 68; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
Db 25 GPGANNMEDSVCCRDYVYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
Qy 62 KMILNKLSQ 70
Db 85 KMILNKLSQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE,

STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2

Query Match 97.7%; Score 381; DB 10; Length 93;
Best Local Similarity 98.6%; Pred. No. 3.3e-39;
Matches 68; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2 GPGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADRPVWV 61
DB 25 GPGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADRPVWV 84
QY 62 KMILNLSQ 70
DB 85 KMILNLSQ 93

RESULT 6
US-10-001-221A-3
Sequence 3, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 68
TYPE: PRT
ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 68.7%; Score 268; DB 15; Length 68;
Best Local Similarity 64.7%; Pred. No. 1.5e-25;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;
QY 2 GPGANMEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADRPVWV 61
DB 1 GPGANVEDSICQDYIRHPLSRVLFKFEFTSKCRKPGVLLTVKNRDICADPRQVWV 60

QY 62 KMILNLS 69
DB 61 KKLHKL 68
RESULT 7
US-10-001-221A-7
Sequence 7, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
LENGTH: 67
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7

Query Match 55.0%; Score 214.5; DB 15; Length 67;
Best Local Similarity 58.5%; Pred. No. 5.2e-19;
Matches 38; Conservative 13; Mismatches 9; Indels 5; Gaps 1;
QY 10 DSV-----CCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKEICADRPVWV 64
DB 3 DSVSIPITCCQDYIRHPLSRVLFKFEFTSKCRKPGVLLTVKNRDICADPRQVWV 62
QY 65 LNKL 69
DB 63 LHLK 67

RESULT 8
US-09-864-761-43730
Sequence 43730, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Weusheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomlca-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30

;; PRIOR APPLICATION NUMBER: PCT/US01/00665
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00668
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00663
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00662
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00661
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00670
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: US 60/234,687
;; PRIOR FILING DATE: 2000-09-21
;; PRIOR APPLICATION NUMBER: US 09/608,408
;; PRIOR FILING DATE: 2000-06-30
;; PRIOR APPLICATION NUMBER: US 09/774,203
;; PRIOR FILING DATE: 2001-01-29
;; NUMBER OF SEQ ID NOS: 49117
;; SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
;; SEQ ID NO 43730
;; LENGTH: 37
;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; FEATURE:
;; OTHER INFORMATION: MAP TO AC004382.1
;; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
;; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
;; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
;; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
;; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
;; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
;; OTHER INFORMATION: EST_HUMAN HIT: W61220.1, EVALUE 8.50e-01
;; OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUE 3.00e-18
US-09-864-761-43730

Query Match 54.68; Score 213; DB 10; Length 37;
Best Local Similarity 100.08; Pred. No. 4.2e-19;
Matches 37; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 ANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGV 42
|||||
DB 1 ANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRGV 37

RESULT 9
US-09-144-838-3
;; Sequence 3, Application US/09144838A
;; Patent No. US20020051996A1
;; GENERAL INFORMATION:
;; APPLICANT: Sianl, Michael A.
;; APPLICANT: Wilken, Jill
;; APPLICANT: Simon, Reyna
;; APPLICANT: Kent, Stephen B.H.
;; TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
;; FILE REFERENCE: GREN-020/01US
;; CURRENT APPLICATION NUMBER: US/09/144,838A
;; CURRENT FILING DATE: 1998-08-31
;; EARLIER APPLICATION NUMBER: US 60/057,620
;; EARLIER FILING DATE: 1997-09-04
;; NUMBER OF SEQ ID NOS: 54
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 3
;; LENGTH: 71
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 39.28; Score 153; DB 10; Length 71;
Best Local Similarity 42.98; Pred. No. 1.8e-11;
Matches 24; Conservative 17; Mismatches 15; Indels 0; Gaps 0;

QY 13 CCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPVWKMLNKL 68
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
DB 12 CCYGFQHPVPVQILKEWYPTSPACPKPGVILLTKRGQICADSPKKNVRLQMRL 67

RESULT 10
US-10-001-221A-6
;; Sequence 6, Application US/10001221A
;; Publication No. US20030108515A1
;; GENERAL INFORMATION:
;; APPLICANT: Schall, Thomas J., Talbot, Dale Berkowitz, Robert
;; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
;; FILE REFERENCE: 10709/14
;; CURRENT APPLICATION NUMBER: US/10/001,221A
;; CURRENT FILING DATE: 2001-10-30
;; PRIOR APPLICATION NUMBER: 09/834,814
;; PRIOR FILING DATE: 2001-04-20
;; NUMBER OF SEQ ID NOS: 7
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 6
;; LENGTH: 78
;; TYPE: PRT
;; ORGANISM: Artificial sequence
;; FEATURE:
;; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 39.08; Score 152; DB 15; Length 78;
Best Local Similarity 40.88; Pred. No. 2.6e-11;
Matches 29; Conservative 16; Mismatches 24; Indels 2; Gaps 2;

QY 2 GPYGANMEDSVCCRDYVRYRLPL-RVYKHFYWTSDSCPRPGVLL-LTFRDKEICADPRVP 59
||||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
DB 1 GPYGANVEDSICFENVINRKIPQIRLESYRITNIQCPKEAVIFKTKRGKVCADPKR 60

QY 60 WVKMILNKLQ 70
||| : : |||
DB 61 WVRDSMKHLQ 71

RESULT 11
US-09-792-793A-28
;; Sequence 28, Application US/09792793A
;; Patent No. US20020168370A1
;; GENERAL INFORMATION:
;; APPLICANT: McDonald, John R.
;; APPLICANT: Coggins, Philip
;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
;; FILE REFERENCE: 25020-601D
;; CURRENT APPLICATION NUMBER: US/09/792,793A
;; CURRENT FILING DATE: 2001-02-22
;; NUMBER OF SEQ ID NOS: 93
;; SOFTWARE: PatentIn ver. 2.0
;; SEQ ID NO 28
;; LENGTH: 69
;; TYPE: PRT
;; ORGANISM: homo sapien
;; FEATURE:
;; OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4)
US-09-792-793A-28

Query Match 37.28; Score 145; DB 11; Length 69;
Best Local Similarity 40.68; Pred. No. 1.7e-10;
Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;

QY 5 GANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPVWKMI 64
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
DB 4.GTNKE--LCCLVLTSMQIPQKFIQVYSETSPQCPKPGVILLTKRGQICADPNKKWQKY 61
QY 65 LNKL 68

; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-6

Query Match 36.9%; Score 144; DB 10; Length 73;
Best Local Similarity 44.6%; Pred No. 2,3e-10;
Matches 25; Conservative 12; Mismatches 19; Indels 0; Gaps 0;

QY 13 CCRDYYRYRLPLRVVYKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
DB 14 CCLGYQKRPLPQVLLSSWYPTSQLCPKPGVILLTKRGRQICADPSKNVVRQLMQRL 69

Search completed: July 28, 2003, 04:20:04
Job time : 9.55882 secs

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 80.2941 Seconds

(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-30

Perfect score: 390

Sequence: 1 LGPYCANMEDSVCCRDYVRY.....EICADRPVWVKMILNKLSQ 70

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Pending_Patents_AA_Main:*

- 1: /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep.*
- 2: /cgn2_6/ptodata/1/paa/US06_COMB.pep.*
- 3: /cgn2_6/ptodata/1/paa/US07_COMB.pep.*
- 4: /cgn2_6/ptodata/1/paa/US08_COMB.pep.*
- 5: /cgn2_6/ptodata/1/paa/US081_COMB.pep.*
- 6: /cgn2_6/ptodata/1/paa/US082_COMB.pep.*
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- 8: /cgn2_6/ptodata/1/paa/US084_COMB.pep.*
- 9: /cgn2_6/ptodata/1/paa/US085_COMB.pep.*
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- 11: /cgn2_6/ptodata/1/paa/US087_COMB.pep.*
- 12: /cgn2_6/ptodata/1/paa/US088_COMB.pep.*
- 13: /cgn2_6/ptodata/1/paa/US089_COMB.pep.*
- 14: /cgn2_6/ptodata/1/paa/US090_COMB.pep.*
- 15: /cgn2_6/ptodata/1/paa/US091_COMB.pep.*
- 16: /cgn2_6/ptodata/1/paa/US092_COMB.pep.*
- 17: /cgn2_6/ptodata/1/paa/US093_COMB.pep.*
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- 24: /cgn2_6/ptodata/1/paa/US100_COMB.pep.*
- 25: /cgn2_6/ptodata/1/paa/US101_COMB.pep.*
- 26: /cgn2_6/ptodata/1/paa/US102_COMB.pep.*
- 27: /cgn2_6/ptodata/1/paa/US60_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	390	100.0	70	13	US-08-939-107-30
2	390	100.0	70	14	US-09-067-447-30
3	390	100.0	70	14	US-09-067-447-30
4	390	100.0	70	14	US-09-067-447-30
5	390	100.0	70	19	US-09-509-165A-30
6	388	99.5	172	20	US-09-509-509-165A-30
					Sequence 49, Appl

7	388	99.5	334	20	US-09-646-028-53	Sequence 53, Appl
8	386	99.0	587	20	US-09-646-028-50	Sequence 50, Appl
9	386	99.0	69	27	US-60-412-856-1	Sequence 1, Appl
10	386	99.0	86	13	US-08-925-837-10	Sequence 10, Appl
11	386	99.0	93	1	PCT-US00-00953-6	Sequence 6, Appl
12	386	99.0	93	8	US-08-464-594-2	Sequence 2, Appl
13	386	99.0	93	8	US-08-479-620-2	Sequence 2, Appl
14	386	99.0	93	9	US-08-558-658-2	Sequence 2, Appl
15	386	99.0	93	11	US-08-760-127-3	Sequence 3, Appl
16	386	99.0	93	12	US-08-820-364-2	Sequence 2, Appl
17	386	99.0	93	13	US-08-925-857-12	Sequence 12, Appl
18	386	99.0	93	13	US-08-931-764-2	Sequence 2, Appl
19	386	99.0	93	13	US-08-931-764B-2	Sequence 2, Appl
20	386	99.0	93	13	US-08-939-107-2	Sequence 2, Appl
21	386	99.0	93	14	US-09-067-447-2	Sequence 2, Appl
22	386	99.0	93	14	US-09-067-447-2	Sequence 2, Appl
23	386	99.0	93	14	US-09-067-447B-2	Sequence 2, Appl
24	386	99.0	93	19	US-09-509-165A-2	Sequence 2, Appl
25	386	99.0	93	19	US-09-591-992-2	Sequence 2, Appl
26	386	99.0	93	21	US-09-712-726-2	Sequence 2, Appl
27	386	99.0	93	21	US-09-791-537-22726	Sequence 22726, A
28	386	99.0	93	22	US-09-811-088-2	Sequence 2, Appl
29	386	99.0	93	22	US-09-837-446-6	Sequence 6, Appl
30	386	99.0	100	21	US-09-760-476-2007	Sequence 2007, Ap
31	386	99.0	100	21	US-09-760-481-204	Sequence 204, App
32	386	99.0	100	26	US-10-216-245-2007	Sequence 204, App
33	386	99.0	100	26	US-10-216-388-204	Sequence 204, App
34	386	99.0	100	26	US-10-217-651-449	Sequence 449, App
35	386	99.0	154	13	US-08-939-107-40	Sequence 40, Appl
36	386	99.0	154	14	US-09-067-447-40	Sequence 40, Appl
37	386	99.0	154	14	US-09-067-447B-40	Sequence 40, Appl
38	386	99.0	154	14	US-09-067-447B-40	Sequence 40, Appl
39	386	99.0	154	19	US-09-509-165A-40	Sequence 40, Appl
40	381	97.7	93	1	PCT-US00-30237-2	Sequence 2, Appl
41	381	97.7	93	13	US-08-986-188-2	Sequence 2, Appl
42	381	97.7	93	18	US-09-432-768-2	Sequence 2, Appl
43	381	97.7	93	18	US-09-484-221-2	Sequence 2, Appl
44	381	97.7	93	23	US-09-908-599-2	Sequence 2, Appl
45	381	97.7	93	23	US-09-908-600-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-08-939-107-30
; Sequence 30, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC:
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/939,107
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995

```

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-939-107-30

Query Match 100.0%; Score 390; DB 13; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLSQ 70
Db 61 VKMILNKLSQ 70

RESULT 2
US-09-067-447-30
; Sequence 30, Application US/09067447
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTI
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/560,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447-30

Query Match 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLSQ 70
Db 61 VKMILNKLSQ 70

RESULT 3
US-09-067-447-30
; Sequence 30, Application US/09067447A
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
; TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
; FILE REFERENCE: 27866/34404
; CURRENT APPLICATION NUMBER: US/09/067,447A
; CURRENT FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: 08/939,107
; EARLIER FILING DATE: 1997-09-26
; EARLIER APPLICATION NUMBER: 08/660,542
; EARLIER FILING DATE: 1996-06-07
; EARLIER APPLICATION NUMBER: 08/558,658
; EARLIER FILING DATE: 1995-11-16
; EARLIER APPLICATION NUMBER: 08/479,620
; EARLIER FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PPT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447-30

Query Match 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLSQ 70
Db 61 VKMILNKLSQ 70

RESULT 4
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US-09-067-447B-30
; Sequence 30, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-30

Query Match 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQSQ 70
Db 61 VKMILNKLQSQ 70

RESULT 5
US-09-509-165A-30
; Sequence 30, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
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; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-30

Query Match 100.0%; Score 390; DB 19; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
Db 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQSQ 70
Db 61 VKMILNKLQSQ 70

RESULT 6
US-09-646-028-49
; Sequence 49, Application US/09646028
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/09/646,028
; CURRENT FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note-synthetic construct
US-09-646-028-49

Query Match 99.5%; Score 388; DB 20; Length 172;
Best Local Similarity 98.6%; Pred. No. 9.7e-41;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
Db 1 MGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 60
QY 61 VKMILNKLQSQ 70
Db 61 VKMILNKLQSQ 70
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RESULT 7
US-09-646-028-53
; Sequence 53, Application US/09646028
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/09/646,028
; CURRENT FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 334
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-09-646-028-53

Query Match 99.5%; Score 388; DB 20; Length 334;
Best Local Similarity 98.6%; Pred. No. 2e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
DB 1 MGPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70

RESULT 8
US-09-646-028-50
; Sequence 50, Application US/09646028
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/09/646,028
; CURRENT FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 50
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-09-646-028-50

Query Match 99.5%; Score 388; DB 20; Length 587;
Best Local Similarity 98.6%; Pred. No. 3.7e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
DB 1 MGPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
QY 61 VKMILNKLQ 70
:|||||
DB 61 VKMILNKLQ 70

RESULT 9
US-60-412-866-1
; Sequence 1, Application US/60412866
; GENERAL INFORMATION:
; APPLICANT: Demotz et al.
; TITLE OF INVENTION: BIOTINYLATED SYNTHETIC CHEMOKINES
; FILE REFERENCE: 29964/38772
; CURRENT APPLICATION NUMBER: US/60/412,866
; CURRENT FILING DATE: 2002-09-23
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-412-866-1

Query Match 99.0%; Score 386; DB 27; Length 69;
Best Local Similarity 100.0%; Pred. No. 6.4e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
:|||||
DB 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
:|||||
QY 62 KMILNKLQ 70
:|||||
DB 61 KMILNKLQ 69

RESULT 10
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnick, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925,857
; FILING DATE: 09-SEP-1997
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/025,724
; FILING DATE: 10-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0614K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-852-9196
; TELEFAX: 650-496-1200
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 86 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-925-857-10

Query Match 99.0%; Score 386; DB 13; Length 86;
Best Local Similarity 100.0%; Pred. No. 8.2e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKKEICADPRVPW 61
|||||

Db 18 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKKEICADPRVPW 77
|||||

QY 62 KMILNKLSQ 70
|||||

Db 78 KMILNKLSQ 86
|||||

RESULT 11

PCT-US00-00953-6

; Sequence 6, Application PC/TUS00000953

; GENERAL INFORMATION:

; APPLICANT: Butcher, Eugene

; APPLICANT: Campbell, James

; APPLICANT: Rottman, James

; APPLICANT: Wu, Lijian

; TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND

; FILE REFERENCE: TARC IN SKIN LYMPHOCYTE HOMING

; CURRENT APPLICATION NUMBER: PCT/US00/00953

; CURRENT FILING DATE: 2000-01-14

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 6

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

PCT-US00-00953-6

Query Match

; Sequence 6, Application PC/TUS00000953

; Best Local Similarity 100.0%; Pred. No. 8.9e-41;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKKEICADPRVPW 61
|||||

Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKKEICADPRVPW 84
|||||

QY 62 KMILNKLSQ 70
|||||

Db 85 KMILNKLSQ 93
|||||

RESULT 12

US-08-464-594-2

; Sequence 2, Application US/08464594

; GENERAL INFORMATION:

; APPLICANT: LI, ET AL

; TITLE OF INVENTION: Human Chemokine Beta-13

; NUMBER OF SEQUENCES: 8

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,

; ADDRESSEE: CECCHI, STEWART & OLSTEIN

; STREET: 6 BECKER FARM ROAD

; CITY: ROSELAND

; STATE: NEW JERSEY

; COUNTRY: USA

; ZIP: 07068

; COMPUTER READABLE FORM:

; MEDIUM TYPE: 3.5 INCH DISKETTE

; COMPUTER: IBM PS/2

; OPERATING SYSTEM: MS-DOS

; SOFTWARE: WORD PERFECT 5.1

; CURRENT APPLICATION DATA:

; FILING DATE: June 5, 1995

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

Query Match 99.0%; Score 386; DB 8; Length 93;

Best Local Similarity 100.0%; Pred. No. 8.9e-41;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: FERRARO, GREGORY D.

REGISTRATION NUMBER: 36,134

REFERENCE/DOCKET NUMBER: 325800-443

TELECOMMUNICATION INFORMATION:

TELEPHONE: 201-994-1700

TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 AMINO ACIDS

TYPE: AMINO ACID

STRANDEDNESS:

TOPOLOGY: LINEAR

MOLECULE TYPE: PROTEIN

US-08-464-594-2

Query Match 99.0%; Score 386; DB 8; Length 93;

Best Local Similarity 100.0%; Pred. No. 8.9e-41;

Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKKEICADPRVPW 61
|||||

Db 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKKEICADPRVPW 84
|||||

QY 62 KMILNKLSQ 70
|||||

Db 85 KMILNKLSQ 93
|||||

RESULT 13

US-08-479-620-2

; Sequence 2, Application US/08479620

; GENERAL INFORMATION:

; APPLICANT: Godiska, Ronald

; APPLICANT: Gray, Patrick W.

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE

; NUMBER OF SEQUENCES: 24

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun

; STREET: 6300 Sears Tower, 233 South Wacker Drive

; CITY: Chicago

; STATE: Illinois

; COUNTRY: United States of America

; ZIP: 60606-6402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/479,620

; FILING DATE:

; CLASSIFICATION: 536

ATTORNEY/AGENT INFORMATION:

NAME: Gass, David A.

REGISTRATION NUMBER: 38,153

REFERENCE/DOCKET NUMBER: 27866/32628

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 93 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-479-620-2

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 24.7059 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-30
Perfect score: 390
Sequence: 1 LGPGYANMEDSVCCRDYVRY.....EICADPRVWVKMLNKLQ 70

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues

Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Pending_Patents_AA_New.*

- 1: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep.*
- 2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4.*
- 3: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep.*
- 4: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4.*
- 5: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep.*
- 6: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep4.*
- 7: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep.*
- 8: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep4.*
- 9: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep.*
- 10: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep4.*
- 11: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep.*
- 12: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep4.*
- 13: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep.*
- 14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	388	99.5	172	12	US-10-335-394-49
2	388	99.5	334	12	US-10-335-394-53
3	388	99.5	587	12	US-10-335-394-50
4	386	99.0	69	12	US-10-341-931-2
5	386	99.0	93	2	PCT-US02-35606-109
6	386	99.0	93	2	PCT-US02-35606-146
7	386	99.0	93	2	PCT-US02-40891-473
8	386	99.0	93	2	PCT-US02-40891-549
9	386	99.0	93	2	PCT-US02-40891-638
10	386	99.0	93	2	PCT-US02-40891-639
11	386	99.0	93	2	PCT-US02-40891-640
12	386	99.0	93	2	PCT-US02-40891-641
13	386	99.0	93	12	US-10-314-410-2
14	386	99.0	93	12	US-10-405-027-5105
15	386	99.0	93	12	US-10-445-790-2
16	386	99.0	93	14	US-60-453-135-8659
17	386	99.0	93	14	US-60-453-050-8659
18	386	99.0	93	14	US-60-455-444-4765
19	386	99.0	93	14	US-60-465-241-4765

20	386	99.0	93	14	US-60-466-412-8659	Sequence 8659, Ap
21	386	99.0	678	2	PCT-US02-40891-333	Sequence 333, Appl
22	381	97.7	93	12	US-10-285-572-2	Sequence 2, Appl
23	381	97.7	93	12	US-10-137-438A-2	Sequence 2, Appl
24	381	97.7	93	12	US-10-406-494-2	Sequence 2, Appl
25	380	97.4	677	2	PCT-US02-40891-422	Sequence 422, App
26	380	97.4	678	2	PCT-US02-40891-257	Sequence 257, App
27	373	95.6	676	2	PCT-US02-40891-423	Sequence 423, App
28	373	95.6	677	2	PCT-US02-40891-425	Sequence 425, App
29	366	93.8	676	2	PCT-US02-40891-445-3	Sequence 3, Appl
30	268	68.7	68	10	US-09-839-445-3	Sequence 3, Appl
31	268	68.7	68	12	US-10-001-221A-3	Sequence 7, Appl
32	214.5	55.0	67	10	US-09-839-445-7	Sequence 7, Appl
33	214.5	55.0	67	12	US-10-001-221A-7	Sequence 6, Appl
34	162.5	41.7	77	10	US-09-839-445-6	Sequence 6, Appl
35	152	39.0	78	12	US-10-001-221A-6	Sequence 6, Appl
36	145	37.2	69	11	US-10-375-209A-28	Sequence 28, Appl
37	145	37.2	89	2	PCT-US02-40891-546	Sequence 546, App
38	145	37.2	89	2	PCT-US02-40891-561	Sequence 561, App
39	145	37.2	89	2	PCT-US02-40891-562	Sequence 562, App
40	145	37.2	89	2	PCT-US02-40891-564	Sequence 564, App
41	145	37.2	89	2	PCT-US02-40891-565	Sequence 565, App
42	145	37.2	89	2	PCT-US02-40891-566	Sequence 566, App
43	145	37.2	89	2	PCT-US02-40891-567	Sequence 567, App
44	145	37.2	89	12	US-10-165-233A-6	Sequence 6, Appl
45	145	37.2	89	12	US-10-405-027-2964	Sequence 2964, Ap

ALIGNMENTS

RESULT 1
US-10-335-394-49
; Sequence 49, Application US/10335394
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; FILE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/10/335,394
; PRIOR FILING DATE: 2002-12-31
; PRIOR APPLICATION NUMBER: US/09/646,028
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-49

Query Match	99.5%	Score 388;	DB 12;	Length 172;
Best Local Similarity	98.6%	Pred. No. 6.4e-41;		
Matches	69;	Conservative	1;	Mismatches 0;
				Indels 0; Gaps 0;
QY	1	LGPGYANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKICADPRVPW	60	
Db	1	MGPGYANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKICADPRVPW	60	
QY	61	VKMILNKLQ 70		
Db	61	VKMILNKLQ 70		

RESULT 2
US-10-335-394-53
; Sequence 53, Application US/10335394
; GENERAL INFORMATION:

```
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/10/335,394
; CURRENT FILING DATE: 2002-12-31
; PRIOR APPLICATION NUMBER: US/09/646,028
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 334
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-53
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Query Match          99.5%; Score 388; DB 12; Length 334;
Best Local Similarity 98.6%; Pred. No. 1.3e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
      :|||||
Db 1 MGPGYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
      :|||||

QY 61 VKMILNKLQ 70
      :|||||
Db 61 VKMILNKLQ 70
```

```
RESULT 3
US-10-335-394-50
; Sequence 50, Application US/10335394
; GENERAL INFORMATION:
; APPLICANT: Kwak, Larry
; APPLICANT: Biragyn, Arya
; TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
; TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
; FILE REFERENCE: 14014.0316/P
; CURRENT APPLICATION NUMBER: US/10/335,394
; CURRENT FILING DATE: 2002-12-31
; PRIOR APPLICATION NUMBER: US/09/646,028
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 60/077,745
; PRIOR FILING DATE: 1998-03-12
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 50
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-50
```

```
Query Match          99.5%; Score 388; DB 12; Length 587;
Best Local Similarity 98.6%; Pred. No. 2.4e-40;
Matches 69; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LGPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
      :|||||
Db 1 MGPGYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
      :|||||

QY 61 VKMILNKLQ 70
      :|||||
Db 61 VKMILNKLQ 70
```

RESULT 4

```
US-10-341-931-2
; Sequence 2, Application US/10341931
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for
; TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
; FILE REFERENCE: 00784 SRP
; CURRENT APPLICATION NUMBER: US/10/341,931
; CURRENT FILING DATE: 2003-01-14
; PRIOR APPLICATION NUMBER: 08/931,764
; PRIOR FILING DATE: 1997-09-16
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-341-931-2
```

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Query Match          99.0%; Score 386; DB 12; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.3e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
      :|||||
Db 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 60
      :|||||

QY 62 KMILNKLQ 70
      :|||||
Db 61 KMILNKLQ 69
```

```
RESULT 5
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109
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Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 61
      :|||||
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
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QY 62 KMILNKLQ 70
      :|||||
Db 85 KMILNKLQ 93
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```
RESULT 6
PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
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;; TITLE OF INVENTION: 41 Human Secreted Proteins
;; FILE REFERENCE: PS740PCT
;; CURRENT APPLICATION NUMBER: PCT/US02/35606
;; CURRENT FILING DATE: 2002-11-06
;; PRIOR APPLICATION NUMBER: 60/331,046
;; PRIOR FILING DATE: 2001-11-07
;; NUMBER OF SEQ ID NOS: 160
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 146
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRGVLLTFRDKEICADPRVPWV 61
|||||
DB 25 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRGVLLTFRDKEICADPRVPWV 84
QY 62 KMILNKLSQ 70
|||||
DB 85 KMILNKLSQ 93

RESULT 7
PCT-US02-40891-473
;; Sequence 473, Application PC/TUS0240891
;; GENERAL INFORMATION:
;; APPLICANT: Human Genome Sciences, Inc.
;; TITLE OF INVENTION: Albumin Fusion Proteins
;; FILE REFERENCE: PF564PCT
;; CURRENT APPLICATION NUMBER: PCT/US02/40891
;; CURRENT FILING DATE: 2002-12-23
;; PRIOR APPLICATION NUMBER: 60/341,811
;; PRIOR FILING DATE: 2001-12-21
;; PRIOR APPLICATION NUMBER: 60/360,000
;; PRIOR FILING DATE: 2002-02-28
;; PRIOR APPLICATION NUMBER: 60/378,950
;; PRIOR FILING DATE: 2002-05-10
;; PRIOR APPLICATION NUMBER: 60/398,008
;; PRIOR FILING DATE: 2002-07-24
;; PRIOR APPLICATION NUMBER: 60/411,355
;; PRIOR FILING DATE: 2002-09-18
;; PRIOR APPLICATION NUMBER: 60/414,984
;; PRIOR FILING DATE: 2002-10-02
;; PRIOR APPLICATION NUMBER: 60/417,611
;; PRIOR FILING DATE: 2002-10-11
;; PRIOR APPLICATION NUMBER: 60/420,246
;; PRIOR FILING DATE: 2002-10-23
;; PRIOR APPLICATION NUMBER: 60/423,623
;; PRIOR FILING DATE: 2002-11-05
;; PRIOR APPLICATION NUMBER: 60/351,360
;; PRIOR FILING DATE: 2002-01-28
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 222
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 473
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match 99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRGVLLTFRDKEICADPRVPWV 61
|||||
DB 25 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRGVLLTFRDKEICADPRVPWV 84

QY 62 KMILNKLSQ 70
|||||
DB 85 KMILNKLSQ 93

RESULT 8
PCT-US02-40891-549
;; Sequence 549, Application PC/TUS0240891
;; GENERAL INFORMATION:
;; APPLICANT: Human Genome Sciences, Inc.
;; TITLE OF INVENTION: Albumin Fusion Proteins
;; FILE REFERENCE: PF564PCT
;; CURRENT APPLICATION NUMBER: PCT/US02/40891
;; CURRENT FILING DATE: 2002-12-23
;; PRIOR APPLICATION NUMBER: 60/341,811
;; PRIOR FILING DATE: 2001-12-21
;; PRIOR APPLICATION NUMBER: 60/360,000
;; PRIOR FILING DATE: 2002-02-28
;; PRIOR APPLICATION NUMBER: 60/378,950
;; PRIOR FILING DATE: 2002-05-10
;; PRIOR APPLICATION NUMBER: 60/398,008
;; PRIOR FILING DATE: 2002-07-24
;; PRIOR APPLICATION NUMBER: 60/411,355
;; PRIOR FILING DATE: 2002-09-18
;; PRIOR APPLICATION NUMBER: 60/414,984
;; PRIOR FILING DATE: 2002-10-02
;; PRIOR APPLICATION NUMBER: 60/417,611
;; PRIOR FILING DATE: 2002-10-11
;; PRIOR APPLICATION NUMBER: 60/420,246
;; PRIOR FILING DATE: 2002-10-23
;; PRIOR APPLICATION NUMBER: 60/423,623
;; PRIOR FILING DATE: 2002-11-05
;; PRIOR APPLICATION NUMBER: 60/351,360
;; PRIOR FILING DATE: 2002-01-28
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 222
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 549
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
PCT-US02-40891-549

Query Match 99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRGVLLTFRDKEICADPRVPWV 61
|||||
DB 25 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRGVLLTFRDKEICADPRVPWV 84
QY 62 KMILNKLSQ 70
|||||
DB 85 KMILNKLSQ 93

RESULT 9
PCT-US02-40891-638
;; Sequence 638, Application PC/TUS0240891
;; GENERAL INFORMATION:
;; APPLICANT: Human Genome Sciences, Inc.
;; TITLE OF INVENTION: Albumin Fusion Proteins
;; FILE REFERENCE: PF564PCT
;; CURRENT APPLICATION NUMBER: PCT/US02/40891
;; CURRENT FILING DATE: 2002-12-23
;; PRIOR APPLICATION NUMBER: 60/341,811
;; PRIOR FILING DATE: 2001-12-21
;; PRIOR APPLICATION NUMBER: 60/360,000
;; PRIOR FILING DATE: 2002-02-28
;; PRIOR APPLICATION NUMBER: 60/378,950
;; PRIOR FILING DATE: 2002-05-10
;; PRIOR APPLICATION NUMBER: 60/398,008
;; PRIOR FILING DATE: 2002-07-24

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; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GPGANNEDSVCCRDYVYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
    |||||
Db 25 GPGANNEDSVCCRDYVYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
    |||||

Qy 62 KMILNKLSQ 70
    |||||
Db 85 KMILNKLSQ 93
    |||||

RESULT 10
PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GPGANNEDSVCCRDYVYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
    |||||
Db 25 GPGANNEDSVCCRDYVYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
    |||||

Qy 62 KMILNKLSQ 70
    |||||
Db 85 KMILNKLSQ 93
    |||||

RESULT 11
PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GPGANNEDSVCCRDYVYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
    |||||
Db 25 GPGANNEDSVCCRDYVYRPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 84
    |||||

Qy 62 KMILNKLSQ 70
    |||||
Db 85 KMILNKLSQ 93
    |||||

RESULT 12
PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
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; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match          99.0%; Score 386; DB 2; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GPGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 61
Db      25 GPGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 84
      |||||||
Qy      62 KMILNKLSQ 70
Db      85 KMILNKLSQ 93
      |||||||

RESULT 13
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          99.0%; Score 386; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GPGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 61
Db      25 GPGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 84
      |||||||
Qy      62 KMILNKLSQ 70
Db      85 KMILNKLSQ 93
      |||||||

RESULT 14
US-10-405-027-5105
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match          99.0%; Score 386; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GPGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 61
Db      25 GPGANNMEDSVCCRDYVRYRLPLRVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 84
      |||||||
Qy      62 KMILNKLSQ 70
Db      85 KMILNKLSQ 93
      |||||||

RESULT 15
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: DeVico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2

Query Match      99.0%; Score 386; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVWV 61
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVWV 84
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY      62 KMILNKLQ 70
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Db      85 KMILNKLQ 93
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Search completed: July 28, 2003, 04:18:50
Job time : 24.7059 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 04:01:18 ; Search time 6.91175 Seconds
(without alignments)
973.617 Million cell updates/sec

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US-09-509-165A-30
Title:
Perfect score: 390
Sequence: 1 LGPYCANMEDSVCCRDYRY.....ETCADPRYPVKWMLNKLSQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

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Searched: 283224 segs, 96134422 residues
Total number of hits satisfying chosen parameters: 2832224
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Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                  Maximum Match 10%
                  Listing first 45

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Database : PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query %		Length	DB	ID	Description
		Match					
1	141	36.2	92	2	I52322	macrophage inflamm	
2	131	33.6	91	1	A28815	monocyte chemoattr	
3	131	33.6	92	2	A32393	macrophage inflamm	
4	129	33.1	91	1	A46539	monocyte chemoattr	
5	129	33.1	92	2	A30574	macrophage inflamm	
6	123.5	31.7	92	1	A31767	macrophage inflamm	
7	122.5	31.4	92	2	C30552	macrophage inflamm	
8	122	31.3	93	2	B35673	LD78-beta protein	
9	117	30.0	99	2	JC5295	monocyte chemotact	
10	116	29.7	109	2	A54678	monocyte chemotact	
11	115	29.5	120	2	I48147	monocyte chemoattr	
12	109.5	28.1	148	1	S07723	immediate-early se	
13	107	27.4	99	2	JC2417	monocyte chemoattr	
14	105	26.9	99	2	A60299	monocyte chemoattr	
15	104.5	26.8	92	2	I46730	immune activation	
16	102.5	26.3	148	1	A30209	PDGF-inducible JE	
17	100.5	25.8	99	1	A39296	monocyte chemoattr	
18	100.5	25.8	99	2	JC2336	monocyte chemoattr	
19	99	25.4	97	2	JC4912	eotaxin precursor	
20	97	24.9	50	2	C60407	monocyte adherence	
21	95.5	24.5	116	2	I49555	gene C10 protein -	
22	93.5	24.0	99	2	JC2136	monocyte chemoattr	
23	93	23.8	96	2	I48099	eotaxin precursor	
24	92	23.6	96	2	JC2478	eotaxin precursor	
25	90.5	23.2	120	2	JF0177	lymphocyte and mon	
26	88	22.6	114	1	ETHUL	lymphotactin precu	
27	87	22.3	96	2	A37236	I-309 protein - mou	
28	83.5	21.4	92	2	S24236	TCA3 protein - mou	
29	83.5	21.4	125	2	I46857	monocyte chemoattr	

RESULT 1
I52322

C:Species: *Rattus norvegicus* (Norway rat)
 C:Date: 29-May-1998 #sequence_revision 29-May-1998
 C:Accession: U52322
 A:Title: Molecular cloning and posttranscriptional regulation of rat macrophage inflammatory protein-1 α - rat
 A:Reference number: U52322; MUID:95298037; PI:1000000000
 A:Accession: U52322
 A:Status: preliminary; translated from GB/EMBL
 A:Molecule type: mRNA
 A:Residues: 1-92 <RES>
 C:Cross-references: EMBL:U22414; NID:g790632
 C:Superfamily macrophage inflammatory protein-1 α

Query Match 36.2%; Score 141; DB 2; Length 92;
Best Local Similarity 39.4%; Pred. NO. 5e-10;
Matches 26; Conservative 17; Mismatches 21; Indels

QY	3	PYGANMEDSVCCEDVYRYELPLRVVKHFWTSDDSPRGCVLLTFRDKEICADPRVPWK	62
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Dd	25	PYGD-TTPACFSYGR-QIPKFTADVFETSSLCSPGVFLTKRNQICADPKETWVQ	82
QY	63	MILNKL	68
		: :	
Dd	83	EVTTEL	88

RESULT 2

A28815
monocyte chemoattractant cytokine RANTES precursor - human
N:Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
C:Species: Homo sapiens (man)
C:Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998
C:Accession: A28815
R:Schall, T.J.; Jonstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M.;
J. Immunol. 141, 1018-1025, 1988
A:Title: A human T cell-specific molecule is a member of a new gene family.
A:Reference number: A28815; MUID:88285659; PMID:2456327

A;Accession: A28815
A;Molecule type: mRNA
A;Residues: 1-91 <SCH>
A;Cross-references: GB:M21121
C;Comment: The acronym RANTES reflects the description "regulated upon activation, normal T-cell expressed and secreted"
C;Genetics:
A;Gene: GDB:SCYA5; D17S136E
A;Cross-references: GDB:I20749; OMIM:187011
A;Map position: 17q11.2-17q12
C;Superfamily: macrophage inflammatory protein
C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation; T-cell

ALIGNMENTS

monocytic cytokine
lymphoactin precu
monocyte chemotac
transformation-ind
RSV-induced protei
C-X-C chemokine LI
platelet basic pro
pre-B-cell growth-
interleukin-8 homo
cytokine SDF-1 bet
cytokine - mouse
alveolar macrophag
interleukin-8 - do
neutrophil-activat
ferrichrome sidero
granulocyte chemot

F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-91/Product: T-cell protein RANTES #status predicted <MAT>

Query Match 33.6%; Score 131; DB 1; Length 91;
Best Local Similarity 33.3%; Pred. No. 8.2e-09;
Matches 22; Conservative 17; Mismatches 25; Indels 1;

QY 3 PYGNMDSVCCRDVYRLPLRVVKKHYWTSDSCPRGVVLLTFRDKEICADPRVPWK 62
DB 25 PYSS--DTTPCCFAYIARPLPRAHKEIFYTSGKSNPAVVVFTRKNQVCANPEKKWVR 82
QY 63 MILNKL 68
DB 83 EVINSL 88

RESULT 3

A32393
macrophage inflammatory protein-1-alpha precursor - mouse
N:Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-1a; SIS a
C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 16-Jul-1999
C:Accession: S11685; A32393; S04533; A53885; A30552; PS0303; A27596; I56104
R:Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Res. 18, 5561, 1990
A:Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein-1.
A:Reference number: S11685; MUID:91016858; PMID:2216738
A:Accession: S11685
A:Molecule type: DNA
A:Residues: 1-92 <GRO>
A:Cross-references: EMBL:X53372; NID:g54062; PIDN:CAA37452.1; PID:g297531
A:Note: the authors' translation of the nucleotide sequence differs at several positions
R:Kwon, B.S.; Weissman, S.M.
Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
A:Title: cDNA sequence of two inducible T-cell genes
A:Reference number: A32393; MUID:89184547; PMID:2784565
A:Accession: A32393
A:Molecule type: mRNA
A:Residues: 1-92 <KWO>
A:Cross-references: GB:J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525
R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Luedke, C.; Gallegos, C.; J. Exp. Med. 167, 1939-1944, 1988
A:Title: Cloning and characterization of a cDNA for murine macrophage inflammatory protein-1.
A:Reference number: S04533; MUID:88258380; PMID:3290382
A:Accession: S04533
A:Molecule type: mRNA
A:Residues: 1-48, 'E', 'I', '92 <DA2>
A:Cross-references: EMBL:X12531
A:Note: the authors translated the codon GAG for residue 49 as Asp and ATT for residue 9
R:Davatellis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermesen, K.; Luedke, C.; Gallegos, C.; J. Exp. Med. 170, 2189, 1989
A:Reference number: A53885
A:Contents: erratum
A:Accession: A53885
A:Molecule type: mRNA
A:Residues: 1-92 <DAV>
A:Cross-references: EMBL:X12531; NID:g53122; PIDN:CAA31047.1; PID:g53123
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A:Title: A family of small inducible proteins secreted by leukocytes are members of a new class of various activation processes.
A:Reference number: A30552; MUID:89093958; PMID:2521353
A:Accession: A30552
A:Molecule type: mRNA
A:Residues: 1-21, 'L', '23-61, 'A', 63-92 <BRO>
A:Cross-references: GB:M23447; NID:g533240; PIDN:AAA40146.1; PID:g533241
R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatellis, G.; Wolpe, S.D.; Mas J. Exp. Med. 168, 2251-2259, 1988
A:Title: Resolution of the two components of macrophage inflammatory protein 1, and cloning of the cDNA for the 17 kDa component.
A:Reference number: JL0088; MUID:89067830; PMID:3058856
A:Accession: PS0303
A:Molecule type: mRNA

A:Residues: 24-33, 'XX', 36-54 <SHE>
R:Wolpe, S.D.; Davatellis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; Mol J. Exp. Med. 167, 570-581, 1988
A:Title: Macrophages secrete a novel heparin-binding protein with inflammatory and chemotactic activity.
A:Reference number: A27596; MUID:88154745; PMID:3279154
A:Accession: A27596
A:Molecule type: protein
A:Residues: 24-33, 'XX', 36-42 <WOL>
A:Note: 26-Met, 30-Pro, and 39-Thr were also found
R:Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
J. Immunol. 146, 4031-4040, 1991
A:Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and comparison with human IL-1.
A:Reference number: I56104; MUID:91237116; PMID:2033269
A:Accession: I56104
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-92 <RES>
A:Cross-references: GB:M73061; NID:g199694; PIDN:AAA39707.1; PID:g199695
C:Comment: This protein is a monokine.

C:Genetics:
A:Introns: 23/3; 26/1; 63/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: heparin binding
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein #status experimental <MAT>

Query Match 33.6%; Score 131; DB 2; Length 92;
Best Local Similarity 37.9%; Pred. No. 8.3e-09;
Matches 25; Conservative 16; Mismatches 23; Indels 2; Gaps 2;

QY 3 PYGNMDSVCCRDVYRLPLRVVKKHYWTSDSCPRGVVLLTFRDKEICADPRVPWK 62
DB 25 PYGAD-TPTACCFYSYR-KIPRQFIVDYFTSSLCSPGVIFLTRNRQICADSKETWVQ 82
QY 63 MILNKL 68
DB 83 EVITDL 88

RESULT 4

A46539
monocyte chemoattractant cytokine RANTES precursor - mouse
N:Alternate names: Murantes
C:Species: Mus musculus (house mouse)
C:Date: 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jun-1999
C:Accession: I48875; A46539; I48654; I56970
R:Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A:Title: Cloning, genomic organization, and chromosomal localization of the Scya5 gene.
A:Reference number: I48875; MUID:94132613; PMID:7507961
A:Accession: I48875
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <DAN>
A:Cross-references: EMBL:U02298; NID:g460090; PIDN:AAA18302.1; PID:g460091
R:Schall, T.J.; Simpson, N.J.; Wak, J.Y.
Eur. J. Immunol. 22, 1477-1481, 1992
A:Title: Molecular cloning and expression of the murine RANTES cytokine: structural analysis of the gene.
A:Reference number: A46539; MUID:92289805; PMID:1376260
A:Accession: A46539
A:Molecule type: mRNA
A:Residues: 1-18, 'A', 20-91 <SCH>
A:Cross-references: GB:S37648; NID:g250207; PIDN:AAB22330.1; PID:g250208
A:Experimental source: macrophage cell line PU5-1.8
A:Note: sequence extracted from NCBI backbone (NCBI:106768, NCBI:106770)
R:Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.; Mol. Cell. Biol. 14, 2914-2925, 1994
A:Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region of the RANTES gene.
A:Reference number: I48654; MUID:94217689; PMID:7513046
A:Accession: I48654
A:Status: translation not shown; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-91 <SHI>

A: Introns: 26/1; 63/2
C: Superfamily: macrophage inflammatory protein
E: Keywords: chemotaxis; cytokine; immediate-early protein; inflammation
F: 1-23/Domain: signal sequence #status predicted <SIG>
F: 24-91/Product: monocyte chemoattractant cytokine RANTES
M: 1-108/Molecule: monocyte chemoattractant cytokine RANTES
P: 24-91/Protein: monocyte chemoattractant cytokine RANTES
S: 24-91/Status: status predicted
T: 24-91/Type: status predicted
V: 24-91/Variant: status predicted
W: 24-91/Weight: status predicted
X: 24-91/X-ray: status predicted
Y: 24-91/Yeast: status predicted
Z: 24-91/Zinc: status predicted

RESULT 6

A31767

macrophage inflammatory protein 1-beta precursor [validated] - human

N:Alternate names: cytokine HC21; G-26 protein; lymphocyte activation protein 2 (Act-2); T-cell activation protein gamma

C:Species: Homo sapiens (man)

C:Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000

C:Accession: JH0319; A40978; A31767; A37411; B30574; B45817; D30352

R:Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechinche, S.; Viegas-Pereira, J. C. 1990

Mol. Immunol. 27, 1091-1102, 1990

A:Title: Cloning and expression of a lymphocyte activation gene (LAG-1).

A:Reference number: JH0319; PMID:91061800; PMID:2247088

A:Status: Translocation not shown
A:Molecule type: DNA
A:Residues: 1-92 <BAI>
A:Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
R:Experimental source: natural killer cell, strain CD3-CD2+, F5, 5IIES
R:Napolitano, M.; Modi, W.S.; Cevalario, S.J.; Gnarra, J.R.; Seunaez, H.N.; Leonard, W.J.
J. Biol. Chem. 266, 17531-17536, 1991
A:Title: The gene encoding the Act-2 cytokines. Genomic structure, HTLV-1/tax responses
A:Reference number: A40978; MUID:91373378; PMID:1894635
A:Accession: A40978
A:Molecule type: DNA
A:Residues: 1-14, 'S', 16-69 'G', 71-92 <NAP>
A:Cross-references: GB:M69201; NID:g178021
R>Note: 15-Ala was also found
R:Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
A:Title: Identification, cloning, and characterization of an immune activation gene.
A:Reference number: A31767; MUID:89071764; PMID:2462251
A:Accession: A31767
A:Molecule type: mRNA
A:Residues: 1-92 <LIP>

A:Cross-references: GB:004130; NID:g176017; PIDN:AAA31576.1; PID:g176018
R:Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
A:Title: Isolation and characterization of a cDNA encoding a putative cytokine which
A:Reference number: A37411; MUID:89325421; PMID:2568930
A:Accession: A37411
A:Molecule type: mRNA
A:Residues: 1-92 <CHA>
A:Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1582-1590, 1989
A:Title: Mitogenic activation of human T cells induces two closely related genes which
A:Reference number: A30574; MUID:89140347; PMID:2521882
A:Accession: B30574
A:Molecule type: mRNA
A:Residues: 1-19, 'L', 21-92 <ZIP>
A:Cross-references: GB:M25316; NID:g602454; PIDN:AA57256.1; PID:g602455
R:Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A:Title: A novel polypeptide secreted by activated human T lymphocytes.
A:Reference number: A45817; MUID:9003852; PMID:2809212
A:Accession: B45817

A:Gene: GDB:SCYA2
A:Cross-references: GDB:125279; OMIM:158105
A:Map position: 17q11.2-17q12
C:Superfamily: macrophage inflammatory protein
C:Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>
F:29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MA
F:24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experimen
F:37/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 26.9%; Score 105; DB 2; Length 99;
Best Local Similarity 29.7%; Pred. No. 1.3e-05;
Matches 22; Conservative 16; Mismatches 30; Indels 6; Gaps 2;
QY 3 PYGANNEDSV-----CCRDVYVRLPLRVVVKHFYWTSDSCPRPGVVLTLFRDKEICADP 56
DB 19 PQGLAQPDALNAPVTCYNTNRKISVQRLASRYRITSSKCPKEAVIFKTVAKEICADP 78
QY 57 RVPVWRMILNKLQ 70
DB 79 KQKVVQDSMDHLQK 92

RESULT 15
I46730
immune activation gene 2 - rabbit
C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 16-Jul-1999
C:Accession: I46730
R:Mori, S.; Goto, K.; Goto, F.; Mutakami, K.; Ohkawara, S.; Yoshinaga, M.
Int. Immunol. 6, 149-156, 1994
A:Title: Dynamic changes in mRNA expression of neutrophils during the course of acute in
A:Reference number: I46730; MUID:94198229; PMID:8148323
A:Accession: I46730
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-92 <MOR>
A:Cross-references: GB:D17402; NID:g599577; PIDN:BAA04226.1; PID:g599578
C:Superfamily: macrophage inflammatory protein

Query Match 26.8%; Score 104.5; DB 2; Length 92;
Best Local Similarity 30.3%; Pred. No. 1.4e-05;
Matches 20; Conservative 16; Mismatches 29; Indels 1; Gaps 1;
QY 3 PYGANNEDSVCCRDVYVRLPLRVVVKHFYWTSDSCPRPGVVLTLFRDKEICADPRVPWVK 62
DB 25 PMGSD-PPTACCFSTLRKLPRHFVIDYFETSLCSQPAVVFQTKKGRQVCANPSESQVQ 83
QY 63 MILNKL 68
DB 84 EYVDDL 89

Search completed: July 28, 2003, 04:15:50
Job time : 6.91176 secs

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OM protein. - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 3.67647 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-30
Perfect score: 390
Sequence: 1 LCPYGANMEDSVCCRDVRY.....EICADPRVFWKMLNKLQ 70

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : | SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	386	99.0	93	1 SY22_HUMAN	O0626 homo sapien
2	268	68.7	92	1 SY22_MOUSE	O88430 mus musculus
3	145	37.2	89	1 SY18_HUMAN	P55774 h small ind
4	141	36.2	92	1 SY03_RAT	P50229 rattus norv
5	137.5	35.3	90	1 SY04_CHICK	O90826 gallus gall
6	131	33.6	91	1 SY05_HUMAN	P13501 homo sapien
7	131	33.6	92	1 SY03_MOUSE	P10855 mus musculus
8	129.5	33.2	104	1 SY12_MOUSE	O62401 mus musculus
9	129	33.1	91	1 SY05_MOUSE	P30882 mus musculus
10	129	33.1	92	1 SY03_HUMAN	P10147 homo sapien
11	129	33.1	92	1 SY05_RAT	P50231 rattus norv
12	128.5	32.9	92	1 SY04_RAT	P50230 rattus norv
13	126	32.3	93	1 SY14_HUMAN	Q16627 homo sapien
14	125	32.1	94	1 VM12_KSHV	O98157 kaposi's sa
15	125	32.1	113	1 SY15_HUMAN	Q16663 homo sapien
16	123.5	31.7	92	1 SY04_HUMAN	P13236 h small ind
17	123	31.5	91	1 SY05_CAVPO	P97272 cavia porce
18	122.5	31.4	92	1 SY04_MOUSE	P14097 mus musculus
19	122	31.3	93	1 SY3L_HUMAN	P16619 homo sapien
20	118.5	30.4	70	1 REG1_BOVIN	P82943 bos taurus
21	118	30.3	91	1 SY05_BOVIN	O97919 bos taurus
22	117	30.0	99	1 SY08_HUMAN	P80075 homo sapien
23	116	29.7	99	1 SY07_HUMAN	P80098 homo sapien
24	115	29.5	120	1 SY02_CAVPO	O08782 cavia porce
25	113	29.0	94	1 SY17_HUMAN	Q92583 homo sapien
26	112.5	28.8	98	1 SY19_HUMAN	O99731 homo sapien
27	109.5	28.1	98	1 SY13_HUMAN	O99616 homo sapien
28	109.5	28.1	108	1 SY19_MOUSE	O70460 mus musculus
29	109.5	28.1	119	1 SY24_MOUSE	O91kc0 mus musculus
30	109.5	28.1	148	1 SY02_RAT	P14844 rattus norv
31	107	27.4	99	1 SY08_PIG	P49873 sus scrofa
32	106	27.2	94	1 SY26_HUMAN	O9y258 homo sapien
33	105	26.9	99	1 SY02_HUMAN	P13500 homo sapien

RESULT 1				
ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O0626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.;			
RA	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Macrophage;			
RX	MEDLINE=97460118; PubMed=9312138;			
RA	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.;			
RA	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99425270; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R., Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RA	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=pancreas, and Spleen;			
RC	Strausberg R.;			
RA	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION.			
RX	MEDLINE=98104168; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., Yoshie O., Gray P.W.;			
RA	"Macrophage-derived chemokine is a functional ligand for the CC			

O9myn4 macaca fasc
P46632 oryctolagus
O89093 mus musculus
P10148 mus musculus
O00175 homo sapien
Q09141 bos taurus
P28291 bos taurus
P51671 homo sapien
P55773 homo sapien
P52203 canis famil
Q29288 sus scrofa
P27784 mus musculus

RN SEQUENCE FROM N.A.
 RA Li H., Ruben S.;
 RL "Macrophage inflammatory protein-3 and -4";
 RT patent number US5504003, 02-APR-1996.
 RN [2]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RX TISSUE-Aorta, and Lung;
 RA Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
 RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
 RA Miura R., Odenakker G., van Damme J., Yoshie O., Nomiya H.;
 RT "A novel human CC chemokine PARC that is most homologous to
 RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
 RT T lymphocytes, but not for monocytes.";
 RL J. Immunol. 159:1140-1149(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98230488; PubMed=9570561;
 RA Kodella V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdts S.;
 RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
 RT structural homologue of macrophage inflammatory protein-1 alpha with
 RT a Th2-associated expression pattern.";
 RL J. Immunol. 160:1411-1418(1998).
 RN [4]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE=97275308; PubMed=9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and characterization
 RT of novel chemokines using the worldwideweb and expressed sequence tag
 RT databases.";
 RL J. Leukoc. Biol. 61:545-550(1997).
 RN [5]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
 RX TISSUE=Dendritic cell;
 RA MEDLINE=97336102; PubMed=9129297;
 RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
 RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
 RA Figdor C.G.;
 RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
 RT naive T cells.";
 RL Nature 387:713-717(1997).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99168908; PubMed=10049593;
 RA Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
 RA Hughes A.L., Nomiya H.;
 RT "Chemokine PARC gene (SCY1A18) generated by fusion of two
 RT MIP-1alpha/LD78alpha-like genes.";
 RL Genomics 55:353-357(1999).
 RN [7]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RX MEDLINE=99189237; PubMed=10087196;
 RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
 RA Neote K., McCall S.R.;
 RT "Genomic organization and biological characterization of the novel
 RT human CC chemokine DC-CK-1/PARC/MIP-4/SCY1A18.";
 RL Genomics 56:296-302(1999).
 RN [8]
 RP SEQUENCE FROM N.A.
 RA Politz O., Kodella V., Guillot P., Orfanos C.E., Goerdts S.;
 RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
 RT within the first intron sequence.";
 RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
 CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
 CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
 CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES,
 CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
 CC AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,

CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOSTEROIDS
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -1- SIMILARITY: BELONGS TO THE INTERCINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
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 DR EMBL; AB000221; BAA21670.1; -
 DR EMBL; Y13710; CAA74039.1; -
 DR EMBL; AB012113; BAA34368.1; -
 DR EMBL; AF082214; AAC32287.1; -
 DR EMBL; AF082212; AAC32287.1; JOINED.
 DR EMBL; AF082213; AAC32287.1; JOINED.
 DR EMBL; AF111198; AAD30390.1; -
 DR HSSP; P13236; LHUM.
 DR Genew; HGNC:10616; SCY1A18.
 DR MIM; 603757; -
 DR InterPro; IPR000827; CC_chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 20
 FT CHAIN 21 89 SMALL INDUCIBLE CYTOKINE A18.
 FT DISULFID 30 54 BY SIMILARITY.
 FT DISULFID 31 70 BY SIMILARITY.
 SQ SEQUENCE 89 AA: 9849 MW: C287B94B9C0518E4 CRC64;
 Query Match 37.2%; Score 145; DB 1; Length 89;
 Best Local Similarity 40.6%; Pred. No. 2.7e-11;
 Matches 26; Conservative 14; Mismatches 22; Indels 2; Gaps 1;
 Qy 5 GANMEDSVCCRDYVRYRLPLRVKHYWTSDCSPRPGVLLTFRDKETCADPRVPWKMI 64
 Db 24 GTNKE--LCCLVYTSQIPQKFIQVYSETSPQCPKPGVILLTKRGRQICADPNKKVQKY 81
 Qy 65 LNKL 68
 Db 82 ISDL 85
 RESULT 4
 SY03_RAT
 ID SY03_RAT STANDARD; PRT; 92 AA.
 AC P50229;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha).
 GN SCYA3 OR MIP1A.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=CD-1; TISSUE=Lung;

RX MEDLINE-95298037; PubMed-7779098;
 RA Shi M.M., Godleski J.J., Paulauskis J.D.;
 RT "Molecular cloning and posttranscriptional regulation of macrophage
 RL inflammatory protein-1 alpha in alveolar macrophages.";
 RN Biochem. Biophys. Res. Commun. 211:289-295(1995).
 RP [2]
 RC SEQUENCE FROM N.A.
 RA STRAIN=Long Evans; TISSUE=Lung;
 RX MEDLINE-95238980; PubMed-7722328;
 RA Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.;
 RT "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
 RL acute lung injury in rats.";
 RN J. Immunol. 154:4793-4802(1995).
 RP [3]
 RC SEQUENCE OF 24-57.
 RA STRAIN=Wistar;
 RX MEDLINE-96183056; PubMed-8607872;
 RA Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
 RT "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
 RL member of rat GRO/CINC, is a predominant chemokine produced by
 RN lipopolysaccharide-stimulated rat macrophages in culture.";
 RC Biochem. Biophys. Res. Commun. 220:945-948(1996).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
 CC HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
 CC BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA
 CC PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
 CC MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
 CC PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
 CC ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFILX. THIS PROTEIN
 CC BINDS HEPARIN.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; U22414; AAA80608.1; -;
 DR EMBL; U06435; AAA96498.1; -;
 DR HSSP; P13236; IHUM.
 DR InterPro: IPR000827; CC_chemkine_sml.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 34 57 BY SIMILARITY.
 FT DISULFID 35 73 BY SIMILARITY.
 FT CONFLICT 6 6 A -> T (IN REF. 2).
 FT CONFLICT 57 57 C -> W (IN REF. 2 AND 3).
 SQ SEQUENCE 92 AA; 10335 MW; 14E861C647F9A2EB CRC64;
 Query Match 36.28; Score 141; DB 1; Length 92;
 Best Local Similarity 39.48; Pred. No. 8.7e-11;
 Matches 26; Conservative 17; Mismatches 21; Indels 2; Gaps 2;
 QY 3 PYGNMDSVCCRDYRVRLPLRVVKHFYWTSSCPRPVGLTFRDKEICADPRVPWK 62
 DB 25 PYGAD-TPTACCSYGR-QIPKRFIADYFTSSLCSPGVIFLTKRNRQICADPKETWQ 82
 QY 63 MILNKL 68
 DB 83 EYITEL 88

RESULT 5
 SY04_CHICK
 ID SY04_CHICK STANDARD; PRT; 90 AA.
 AC Q90826; Q910C9;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 15-JUN-2002 (Rel. 41, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
 DE protein 1-beta homolog).
 GN SCY4A.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Bone marrow;
 RX MEDLINE-95369710; PubMed-7642115;
 RA Petrenko O., Ischenko I., Enrietto P.J.;
 RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
 RL mammalian macrophage inflammatory protein-1 beta.";
 RN Gene 160:305-306(1995).
 RP SEQUENCE FROM N.A.
 RA Hughes S.M., Bumstead N.;
 RT "Mapping of the gene encoding the chicken homologue of the mammalian
 RL chemokine SCY4A.";
 RN Submitted (JUN-1995) to the EMBL/GenBank/DBJ databases.
 RP SEQUENCE OF 14-90 FROM N.A.
 RA Petrenko O., Enrietto P.J.;
 RL Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
 CC (BY SIMILARITY).
 CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; L34553; AAA48747.1; -;
 DR EMBL; AJ243034; CAB45103.1; -;
 DR HSSP; P13236; IHUM.
 DR InterPro: IPR000827; CC_chemkine_sml.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 DR Cytokine; Chemotaxis; Signal.
 FT SIGNAL 1 21 BY SIMILARITY.
 FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
 FT DISULFID 32 56 BY SIMILARITY.
 FT DISULFID 33 72 BY SIMILARITY.
 FT CONFLICT 87 87 M -> L (IN REF. 1).
 SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
 Query Match 35.38; Score 137.5; DB 1; Length 90;
 Best Local Similarity 37.98; Pred. No. 2.3e-10;
 Matches 25; Conservative 14; Mismatches 26; Indels 1; Gaps 1;
 QY 3 PYGNMDSVCCRDYRVRLPLRVVKHFYWTSSCPRPVGLTFRDKEICADPRVPWK 62
 DB 23 PVGSDPPTS-CCFTYISRLQFPFSDVADYETNSQCHAGVVFITRKREVCANPNDWQV 81
 QY 63 MILNKL 68

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Db      82 DYNKM 87

RESULT 6
SY05_HUMAN STANDARD; PRT; 91 AA.
AC P13501; O43646; Q9NYA2;
DT 01-JAN-1990 (Rel. 13, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (Sis-delta) (T cell-specific protein P228) (TCP228).
GN SCYA5.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=88285659; PubMed=2456327;
RA Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C.,
RA Davis M.M., Krensky A.M.;
RT "A human T cell-specific molecule is a member of a new gene family.";
RL J. Immunol. 141:1018-1025(1988).
RN [2]
RP SEQUENCE FROM N.A.
RA Jang J.S., Kim B.E.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=99228475; PubMed=10213461;
RA Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MP1-1, HCC-2, LEC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
RN [4]
RP SEQUENCE FROM N.A.
RA Zeng Q.P., Yang R.Y., Fu L.C.;
RT "The complete sequence of human beta-chemokine RANTES mRNA.";
RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA TISSUP-Brain;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE OF 49-56; 71-79 AND 83-91, AND FUNCTION.
RX MEDLINE=96106406; PubMed=8525373;
RA Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
RA Lusso P.;
RT "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
RT HIV-suppressive factors produced by CD8+ T cells.";
RL Science 270:1811-1815(1995).
RN [7]
RP STRUCTURE BY NMR.
RX MEDLINE=95352612; PubMed=7542919;
RA Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;
RT "The three-dimensional solution structure of RANTES.";
RL Biochemistry 34:9307-9314(1995).
RN [8]
RP STRUCTURE BY NMR.
RX MEDLINE=95244456; PubMed=7537088;
RA Skelton N.J., Aspiras F., Ogez J., Schall T.J.;
RT "Proton NMR assignments and solution conformation of RANTES, a
RT chemokine of the C-C type.";
RL Biochemistry 34:5329-5342(1995).
RN [9]
RP SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
RX MEDLINE=99111238; PubMed=9889151;
RA Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
RA Picard L., Wlodawer A., Lubkowski J., Kent S.B.;

"Total chemical synthesis and high-resolution crystal structure of
the potent anti-HIV protein AOP-RANTES.";
Chem. Biol. 6:43-51(1999).
RN [10]
RP X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
RA Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C.,
RA Lubkowski J.;
RT "The crystal structure of Met-RANTES: comparison with native RANTES
RT and AOP-RANTES.";
RL Protein Pept. Lett. 7:73-82(2000).
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCR1, CCR3, CCR4 AND
CC CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T
CC CELLS. RECOMBINANT RANTES PROTEIN INDUCES A DOSE-DEPENDENT
CC INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN
CC IMMUNODEFICIENCY VIRUS (SIV).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- INDUCTION: BY MITOGENS.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; M21121; AAA36725.1; -
DR EMBL; AF043341; AAC03541.1; -
DR EMBL; AF088219; AAC63331.1; -
DR EMBL; AF266753; AAF73070.1; -
DR EMBL; BC008600; AAH08600.1; -
DR PIR; A28815; A28815.
DR PDB; 1HRJ; 14-OCT-96.
DR PDB; 1RTN; 03-JUN-95.
DR PDB; 1RTO; 03-JUN-95.
DR PDB; 1B3A; 23-APR-99.
DR PDB; 1EQ7; 19-APR-00.
DR Genew; HGNC:10632; SCYA5.
DR MIM; 187011; -
DR InterPro; IPR000827; CC_chemkine_sm.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;
KW 3D-structure.
FT SIGNAL 1 23 SMALL INDUCIBLE CYTOKINE A5.
FT CHAIN 24 91
FT DISULFID 33 57
FT DISULFID 34 73
FT CONFLICT 7 7 A -> R (IN REF. 1 AND 4).
FT CONFLICT 14 14 A -> V (IN REF. 4).
FT CONFLICT 14 14 A -> V (IN REF. 4).
FT SEQUENCE 91 AA; 9990 MW; EB0BFAF9A87C620F CRC64;
Query Match 33.6%; Score 131; DB 1; Length 91;
Best Local Similarity 33.3%; Pred. No. 1.5e-09;
Matches 22; Conservative 17; Mismatches 25; Indels 2; Gaps 1;
Qy 3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLVTFRKEICADPRVPVK 62
Dy 25 PYSS--DTTPCCFAYIARPLPRAHIKEYFTYSGKSNPAAVVFVTRKNRQVCANPEKKWR 82
Qy 63 MILNKL 68
Dy 83 EYINSL 88
RESULT 7

```


OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97079149; PubMed=8920881;
 RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C.,
 RA Werthel B.K., Gutierrez-Ramos J.C.;
 RT "Distinct expression and function of the novel mouse chemokine
 RT monocyte chemoattractant protein-5 in lung allergic inflammation.";
 RL J. Exp. Med. 184:1939-1951(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97149438; PubMed=8996246;
 RA Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;
 RA "Murine monocyte chemoattractant protein (MCP)-5: a novel CC
 RT chemokine that is a structural and functional homologue of human
 RT MCP-1.";
 RL J. Exp. Med. 185:99-109(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX STRAIN=B10.S/J, BALB/c, DBA/2J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
 RX MEDLINE=99370037; PubMed=10438970;
 RA Teuscher C., Butterfield R., Ma R.Z., Zachary J.F., Doerge R.W.,
 RA Blankenhorn E.P.;
 RT "Sequence polymorphisms in the chemokines Sca1 (TCA-3), Sca2
 RT (monocyte chemoattractant protein (MCP)-1), and Sca12 (MCP-5) are
 RT candidates for eae7, a locus controlling susceptibility to monophasic
 RT remitting/nonrelapsing experimental allergic encephalomyelitis.";
 RL J. Immunol. 163:2262-2266(1999).
 CC -|- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
 CC AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
 CC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
 CC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
 CC PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
 CC -|- SUBUNIT: HOMODIMER (BY SIMILARITY).
 CC -|- SUBCELLULAR LOCATION: Secreted.
 CC -|- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
 CC THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
 CC BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
 CC -|- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
 CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
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 CC -----
 DR EMBL; U50712; AAB50053.1; -;
 DR EMBL; U66670; AAB49424.1; -;
 DR EMBL; AF065934; AAF15384.1; -;
 DR EMBL; AF065935; AAF15385.1; -;
 DR EMBL; AF065936; AAF15386.1; -;
 DR EMBL; AF065937; AAF15387.1; -;
 DR EMBL; AF065938; AAF15388.1; -;
 DR HSSP; P13500; IDOL.
 DR MGD; MGI:108224; Sca12.
 DR InterPro; IPR000827; CC_chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Signal; Inflammatory response.
 FT SIGNAL 1 22 BY SIMILARITY.
 FT CHAIN 23 104 SMALL INDUCIBLE CYTOKINE A12.
 FT DISULFID 33 58 BY SIMILARITY.
 FT DISULFID 34 74 BY SIMILARITY.
 FT VARIANT 94 104 QFILEPSCIG -> RT (IN STRAIN SJL/J).
 SQ SEQUENCE 104 AA; 11659 MW; 8D102F4FF4CC3DBF CRC64;

Query Match 33.2%; Score 129.5; DB 1; Length 104;
 Best Local Similarity 42.4%; Pred. No. 2.7e-09;
 Matches 25; Conservative 11; Mismatches 22; Indels 1; Gaps 1;
 QY 13 CCRDVYRRLPLRVVKKHF-YWTSDSCPRGVVLLTFRDKEICADPRVWVKMLNLSQ 70
 DB 33 CCYNYVQKIHVRKLSYRRITSSQCPRVAFRTILDKEICADPKKWKNSINHLDK 91
 || : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
 DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
 DE protein) (SIS-delta) (Mukantes).
 GN SCYA5.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92277990; PubMed=1375672;
 RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
 RA Kresky A.M., Neilson E.G.;
 RT "Isolation and characterization of cDNA from renal tubular epithelium
 RT encoding murine Rantes.";
 RL Kidney Int. 41:220-225(1992).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92289805; PubMed=1376260;
 RA Schall T.J., Simpson N.J., Mak J.Y.;
 RT "Molecular cloning and expression of the murine RANTES cytokine;
 RT structural and functional conservation between mouse and man.";
 RL Eur. J. Immunol. 22:1477-1481(1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX STRAIN=NIH Swiss;
 RX MEDLINE=94132613; PubMed=7507961;
 RA Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
 RT "Cloning, genomic organization, and chromosomal localization of the
 RT Sca5 gene encoding the murine chemokine RANTES.";
 RL J. Immunol. 152:1182-1189(1994).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX STRAIN=BALB/c;
 RX MEDLINE=94217689; PubMed=7513046;
 RA Shin H.-S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
 RA Paznekas W.A.;
 RT "Definition of a lipopolysaccharide-responsive element in the 5'-
 RT flanking regions of Murantes and crg-2.";
 RL Mol. Cell. Biol. 14:2914-2925(1994).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX STRAIN=BALB/CJ,B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
 RA Ma R.Z., Teuscher C.;
 RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
 CC -|- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
 CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
 CC BASOPHILS AND ACTIVATES EOSINOPHILS.
 CC -|- SUBCELLULAR LOCATION: Secreted.
 CC -|- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
 CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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```
FT SIGNAL 1 23
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
FT MUTAGEN 49 49 D-2A: IN BB-10010; IMPROVED
FT SEQUENCE 92 AA; 10085 MW; 517865D5D6776CA8 CRC64;
PHARMACEUTICAL PROPERTIES.

Query Match 33.1%; Score 129; DB 1; Length 92;
Best Local Similarity 34.5%; Pred. No. 2.7e-09;
Matches 20; Conservative 14; Mismatches 24; Indels 0; Gaps 0;

QY 11 SVCCRDYVRLPLRVKHYFTSDSCPRGVLLTFRDKEICADPRVPWKMLNKL 68
: || | : || | : || | : || | : || | : || | : || | : || |
Db 31 TACCFSVTSRQIPQNETADYFETSSQCKPGVIFLTKRSQVCADPSEWVQYVSD 88

RESULT 11
SY05_RAT STANDARD; PRT; 92 AA.
AC P50231;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta).
GN SCY5.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
CC -----
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between the Swiss Institute of Bioinformatics and the EMBL outstation -
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entities requires a license agreement (See http://www.isb-sib.ch/announce/
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CC -----
CC EMBL; U06436; AAA96499.1;
CC HSSP; P13236; 1HUM.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCY; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
FT SEQUENCE 92 AA; 10170 MW; BAFBEC2B4208ABC6 CRC64;

Query Match 33.1%; Score 129; DB 1; Length 92;
Best Local Similarity 36.4%; Pred. No. 2.7e-09;
Matches 24; Conservative 15; Mismatches 25; Indels 2; Gaps 1;

QY 3 PYGANNEDSVCCRDYVRLPLRVKHYFTSDSCPRGVLLTFRDKEICADPRVPWK 62
||||: : || | : || | : || | : || | : || | : || | : || |
Db 26 PYGS--DTTPCCFAYLSLALPRAHVKEYFTTSKCSNLAVFVTRNRQVCANPEKKVQ 83

RESULT 12
SY04_RAT STANDARD; PRT; 92 AA.
AC P50230;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
protein 1-beta) (MIP-1-beta).
GN SCY4 OR MIP1B.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
CC -!- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
CC -----
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CC -----
CC EMBL; U06434; AAA96497.1;
CC HSSP; P13236; 1HUM.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCY; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Inflammatory response; Signal.
FT SIGNAL 1 23 BY SIMILARITY.
FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A4.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
FT SEQUENCE 92 AA; 10234 MW; 60B451EEBEC7103D CRC64;

Query Match 32.9%; Score 128.5; DB 1; Length 92;
Best Local Similarity 39.4%; Pred. No. 3.2e-09;
Matches 26; Conservative 10; Mismatches 29; Indels 1; Gaps 1;

QY 3 PYGANNEDSVCCRDYVRLPLRVKHYFTSDSCPRGVLLTFRDKEICADPRVPWK 62
||||: : || | : || | : || | : || | : || | : || | : || |
Db 25 PGSDPPTS-CCFSYTSRKIHNFVMDYETSSLCSPQAVVFLTKRQICADPSEFPWN 83

RESULT 13
SY14_HUMAN STANDARD; PRT; 93 AA.
AC Q16627; Q13954;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
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Search completed: July 28, 2003, 04:01:12
Job time : 3.67647 secs


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Db 74 KKILHKL 81
RESULT 2
Q91ZH5 PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1; -.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;
Query Match 69.5%; Score 271; DB 11; Length 92;
Best Local Similarity 66.2%; Pred. No. 7.2e-28;
Matches 45; Conservative 14; Mismatches 9; Indels 0; Gaps 0;
QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVKKFYWTSDSCPRPGVLLTFRDKKEICADPRVPMV 61
DB 25 GPYGANVEDSICCCQDIYRHPLPRLVKEFFWTSKCRKPGVLLITIKNRDICAADPRMLVW 84
QY 62 KMILNKL 69
DB 85 KKILHKL 92
RESULT 3
Q9QZU2 PRELIMINARY; PRT; 92 AA.
AC Q9QZU2;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-0(1999).
DR EMBL; AF163476; AAD55763.1; -.
DR HSSP; Q98157; 1C49.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR SEQUENCE 92 AA; 10331 MW; 17FE31A87F352B63 CRC64;
Query Match 68.7%; Score 268; DB 11; Length 92;
Best Local Similarity 64.7%; Pred. No. 1.8e-27;
Matches 44; Conservative 15; Mismatches 9; Indels 0; Gaps 0;
QY 2 GPYGANMEDSVCCRDYVRYRLPLRVVKKFYWTSDSCPRPGVLLTFRDKKEICADPRVPMV 61
DB 25 GPYGANVEDSICCCQDIYRHPLPRLVKEFFWTSKCRKPGVLLITIKNRDICAADPRVPMV 84
QY 62 KMILNKL 69
DB 85 KKILHKL 92
RESULT 4
Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; O12569;
DT 01-FEB-1997 (TREMBlrel. 02, Created)
DT 01-JUL-1997 (TREMBlrel. 04, Last sequence update)
DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.";
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
RT (HHV8).";
RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
RN [3]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Ciuffo D.,
RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=97296220; PubMed=9151804;
RA Neipel F., Albrecht J.C., Fleckenstein B.;
RT "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
RT human herpesvirus 8: determinants of its pathogenicity?";
RL J. Virol. 71:4187-4192(1997).
RN [7]
RP SEQUENCE FROM N.A.
RA Sun R., Lin S.-F., Miller G.;
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A.
RA Ren S., Lin S.-F., Miller G.;
RL Submitted (FEB-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; U75698; AAC57095.1; -.
DR EMBL; U74585; AAB61704.1; -.
DR EMBL; U93872; AAB62671.1; -.

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DR EMBL; U71366; AAC34943.1; -.
DR EMBL; U50138; AAD11536.1; -.
DR HSP; Q98157; IYMP.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Hypothetical protein.
SQ SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;

Query Match 39.2%; Score 153; DB 12; Length 95;
Best Local Similarity 42.9%; Pred. No. 2.2e-12;
Matches 24; Conservative 17; Mismatches 15; Indels 0; Gaps 0;

Qy 13 CCRDYVRYRLPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPVWK 68
  || : : : : : || : : : : : || : : : : : || : : : : : || : : : : :
Db 36 CCGYFQHPVPVQILKEWYPTSPACKPGVILLTKRGQICADPSKNVVRQLMQL 91

RESULT 5
Q8QG57 PRELIMINARY; PRT; 91 AA.
AC Q8QG57;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DE Chemokine ah294.
OS Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP MEDLINE=21655115; PubMed=11757102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
  chicken CC chemokines.";
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match 36.7%; Score 143; DB 13; Length 91;
Best Local Similarity 39.4%; Pred. No. 4.2e-11;
Matches 26; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVRYRLPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPVWK 62
  |::| : : : : : |::| : : : : : |::| : : : : : |::| : : : : : |::|
Db 25 PFGA--DTTVCFCFNSVRKLPQNHVKDYFTSSKCPQAAVVFITRKGRQVCANPDARWK 82

Qy 63 MILNKL 68
  :|
Db 83 EYINFL 88

Query Match 36.7%; Score 142; DB 13; Length 89;
Best Local Similarity 30.9%; Pred. No. 5.6e-11;
Matches 21; Conservative 21; Mismatches 24; Indels 2; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVRYRLPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPVWK 62
  |::| : : : : : |::| : : : : : |::| : : : : : |::| : : : : : |::|
Db 23 PVGPDV--PTCCCTTYTHKIPRNLIQRIHYSTSCSKPAIFITKREVCANPSDPWQ 80

Qy 63 MILNKL 70
  :|
Db 81 RYLOSVKR 88

RESULT 6
Q91ZL0 PRELIMINARY; PRT; 92 AA.
AC Q91ZL0;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
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DR EMBL; AF421392; AAL16933.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN.1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match 36.5%; Score 142.5; DB 11; Length 92;
Best Local Similarity 43.9%; Pred. No. 5e-11;
Matches 29; Conservative 8; Mismatches 28; Indels 1; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVRYRLPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPVWK 62
  |::| : : : : : |::| : : : : : |::| : : : : : |::| : : : : : |::|
Db 25 PRGSDPPIS--CCFSYASRKLPNFVTDYETSSLCSPKPAVVFITRKGRKEYCADPSQPVN 83

Qy 63 MILNKL 68
  :|
Db 84 EYVNDL 89

RESULT 7
Q918E0 PRELIMINARY; PRT; 89 AA.
AC Q918E0;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Chemokine K203 precursor.
GN K203.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20170941; PubMed=10704244;
RA Sick C., Schneider K., Staeheli P., Weinig K.C.;
RT "Novel chicken CXCL and CC chemokines.";
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -.
DR HSP; P13236; IHUM.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Signal.
FT SIGNAL 1 21 POTENTIAL.
FT CHAIN 22 89 CHEMOKINE K203.
SQ SEQUENCE 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;

Query Match 36.4%; Score 142; DB 13; Length 89;
Best Local Similarity 30.9%; Pred. No. 5.6e-11;
Matches 21; Conservative 21; Mismatches 24; Indels 2; Gaps 1;

Qy 3 PYGANNEDSVCCRDYVRYRLPLRVKHFYVTSQCPRPVGVLLTFRDKKEICADPRVPVWK 62
  |::| : : : : : |::| : : : : : |::| : : : : : |::| : : : : : |::|
Db 23 PVGPDV--PTCCCTTYTHKIPRNLIQRIHYSTSCSKPAIFITKREVCANPSDPWQ 80

Qy 63 MILNKL 70
  :|
Db 81 RYLOSVKR 88

RESULT 8
Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIP1 ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).
```

ID	Q910C9	PRELIMINARY;	PRT;	90 AA.
DT	Q910C9;			
DT	01-DEC-2001	(TrEMBLrel. 19, Created)		
DT	01-DEC-2001	(TrEMBLrel. 19, Last sequence update)		
DT	01-MAR-2002	(TrEMBLrel. 20, Last annotation update)		
DE	Macrophage inflammatory protein 1-beta.			
GN	SCYA4.			
OC	Gallus gallus (Chicken).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Archosauia; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;			
OC	Gallus.			
OX	NCBI_TaxID=9031;			
RN	[1]			
RN	SEQUENCE FROM N.A.			
RA	Hughes S.M., Bumstead N.;			
RP	"Mapping of the gene encoding the chicken homologue of the mammalian			
RT	chemokine SCYA4.";			
RL	Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.			
DR	EMBL; AJ243034; CAB45103.1; -			
DR	InterPro; IPR000827; CC_Chemkine_sml.			
DR	InterPro; IPR001811; Chemokine_IL8.			
DR	Pfam; PF00048; IL8; 1			
DR	PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.			
SQ	SEQUENCE	90 AA; 9987 MW; 50AF967A267408F CRC64;		
	Query Match	35.3%; Score 137.5; DB 13; Length 90;		
	Best Local Similarity	37.9%; Pred. No. 2.2e-10;		
	Matches	25; Conservative 14; Mismatches 26; Indels 1; Gaps 1;		
QY	3	PYGANNEDSVCCRDYYVRYRLPLRVKHFVWTSDCSPRGVLLTFRDKETCADPRVPWK	62	
Dd	23	PVGSDPPTS-CCTFYISRLQFPFSFVDYVETNSQCCHAGVVFITRKGREVCANPENDWVQ	81	
QY	63	MILNKL 68		
Dd	:	:		
Dd	82	DYNKM 87		
RESULT 11				
Q8QA6				
ID	Q8QA6	PRELIMINARY;	PRT;	93 AA.
AC	Q8QA6;			
DT	01-JUN-2002	(TrEMBLrel. 21, Created)		
DT	01-JUN-2002	(TrEMBLrel. 21, Last sequence update)		
DT	01-JUN-2002	(TrEMBLrel. 21, Last annotation update)		
DE	Macrophage inflammatory protein-1 alpha.			
OS	Bos taurus (Bovine).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidea;			
OC	Bovidae; Bovinae; Bos.			
OX	NCBI_TaxID=9913;			
RN	[1]			
RN	SEQUENCE FROM N.A.			
RA	Werling D.;			
RL	"Role of chemokines in RSV infection.";			
RT	Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.			
DR	EMBL; AY077840; AL78060.1; -			
SQ	SEQUENCE	93 AA; 10118 MW; 1266BFBCCE5E89 CRC64;		
	Query Match	32.4%; Score 126.5; DB 6; Length 93;		
	Best Local Similarity	33.3%; Pred. No. 6.3e-09;		
	Matches	22; Conservative 17; Mismatches 26; Indels 1; Gaps 1;		
QY	3	PYGANNEDSVCCRDYYVRYRLPLRVKHFVWTSDCSPRGVLLTFRDKETCADPRVPWK	62	
Dd	25	PFQAD-TPTACCFSYVARQLSRIVADYFETSQCCKPGVIFQTKKGRQVCANPTDWWQ	83	
QY	63	MILNKL 68		
Dd	:	:		
Dd	84	EYITDL 89		
RESULT 12				

Q8SQ40 PRELIMINARY; PRT; 92 AA.
AC Q8SQ40;
DT 01-JUN-2002 (TremBLrel. 21, Created)
DT 01-JUN-2002 (TremBLrel. 21, Last sequence update)
DE 01-JUN-2002 (TremBLrel. 21, Last annotation update)
DE RANTES protein.
GN RANTES.
OS Felis silvestris catus (Cat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
OX NCBI_TaxID=9685;
RN [1]
RP SEQUENCE FROM N.A.
RA Kimura T., Kano R., Hasegawa A.;
RT "molecular cloning of feline RANTES gene."
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB03479; BAB8940.1; -
SQ SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;
Query Match 32.3%; Score 126; DB 6; Length 92;
Best Local Similarity 35.0%; Pred. No. 7.2e-09;
Matches 21; Conservative 17; Mismatches 20; Indels 2; Gaps 1;
QY 3 PYGAMEDSVCCRDYVYRLPLRVVYKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWVK 62
Db Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Strausberg R.;
RT TISSUE-B-CELL;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC007783; AAH07783.1; -
DR InterPro; IPR000827; CC.ChemKine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;
Query Match 31.3%; Score 122; DB 4; Length 93;
Best Local Similarity 32.8%; Pred. No. 2.4e-08;
Matches 19; Conservative 14; Mismatches 25; Indels 0; Gaps 0;
QY 11 SVCCRDYVYRLPLRVVYKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWVKMLNKL 68
Db TACCFSYTSRQIPQNFADYFETSSQCSKPSVIFLTRKGRQVCADPSEEWQKYSVL 89
RESULT 14
Q91ZL1 PRELIMINARY; PRT; 91 AA.
ID Q91ZL1
AC Q91ZL1;
DT 01-DEC-2001 (TremBLrel. 19, Created)
DT 01-DEC-2001 (TremBLrel. 19, Last sequence update)
DT 01-NAR-2002 (TremBLrel. 20, Last annotation update)
DE RANTES chemokine.
OS Sigmmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmmodon hispidus cytokines, chemokines and interferons."
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF421391; AAL16932.1; -
DR InterPro; IPR000827; CC.ChemKine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 91 AA; 10082 MW; D0D6AEABE4242FF CRC64;
Query Match 30.6%; Score 119.5; DB 11; Length 91;
Best Local Similarity 36.5%; Pred. No. 5.1e-08;
Matches 23; Conservative 15; Mismatches 24; Indels 1; Gaps 1;
QY 7 NMEDSV-CCRDYVYRLPLRVVYKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWVKMIL 65
Db NGSDTIPCCFAVLSAVLPAHVKEYFYTSSKCSNFVTVTRNRQVCANPKKKVQVEYI 85
QY 66 NKL 68
Db 86 NYL 88
*RESULT 15
Q14745 PRELIMINARY; PRT; 80 AA.
ID Q14745
AC Q14745;
DT 01-NOV-1996 (TremBLrel. 01, Created)
DT 01-NOV-1996 (TremBLrel. 01, Last sequence update)
DT 01-NAR-2002 (TremBLrel. 20, Last annotation update)
DE LD78 alpha beta precursor (fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA TISSUE-BRAIN;
RA Ishizuka K., Igata-Yi R., Naruse K., Nakashima H., Ohuchi K.,
RA Katsuragi S., Kin Y., Ohmoto Y., Nomiyama H., Iio M., Miura R.,
RA Miyakawa T.;
RL Submitted (AUG-1995) to the EMBL/GenBank/DBJ databases.
DR EMBL; D63785; BAA09855.1; -
DR HSP; P13236; 1HUM.
DR InterPro; IPR000827; CC.ChemKine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Signal.
FT NON_TER 1 1
FT SIGNAL <1 16 POTENTIAL.
FT CHAIN 17 >80 LD78 ALPHA BETA.
FT NON_TER 80 80
SQ SEQUENCE 80 AA; 8857 MW; 8B509EB15648E971 CRC64;
Query Match 30.0%; Score 117; DB 4; Length 80;
Best Local Similarity 34.6%; Pred. No. 9.6e-08;
Matches 18; Conservative 12; Mismatches 22; Indels 0; Gaps 0;
QY 11 SVCCRDYVYRLPLRVVYKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWVK 62
Db TACCFSYTSRQIPQNFADYFETSSQCSKPSVIFLTRKGRQVCADPSEEWQ 76
Search completed: July 28, 2003, 04:02:52
Job time : 12.9412 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 15.0756 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-31

Perfect score: 382

Sequence: 1 GPYGANMEDSVCCRDVVR...EICADPRVPYKMLNKLQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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1: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
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22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	382	100.0	69	AAW20061	Human macrophage d
2	382	100.0	69	AAW24415	Macrophage derived
3	382	100.0	69	AAW05874	Human macrophage-d
4	374	97.9	69	AAO20022	Human chemokine MD
5	374	97.9	69	AAO14155	Human MDC protein.
6	374	97.9	70	AAW20060	Human macrophage d
7	374	97.9	70	AAW24413	Macrophage derived
8	374	97.9	70	AAW05873	Human macrophage-d
9	374	97.9	86	AAW59432	Human chemokine pr
10	374	97.9	93	AAW20058	Macrophage derived

11	374	97.9	93	AAW62783	Amino acid sequenc
12	374	97.9	93	AAW59433	Human chemokine pr
13	374	97.9	93	AAW40811	Macrophage-derived
14	374	97.9	93	AAW26175	Macrophage-derived
15	374	97.9	93	AAW24414	Human macrophage d
16	374	97.9	93	AAW05871	Human macrophage-d
17	374	97.9	93	AAW06829	Macrophage derived
18	374	97.9	93	AAW07500	A human monokine d
19	374	97.9	93	AAO14046	Human macrophage-d
20	374	97.9	154	AAW05878	Yeast pre-pro-alpha
21	374	97.9	172	AAW29895	Human MDC and huma
22	374	97.9	334	AAW29904	Human MDC and huma
23	374	97.9	587	AAW29900	Human MDC and HIV-
24	369	96.6	93	AAW07604	Cytokine beta-13 s
25	369	96.6	93	AAW57881	Human chemokine be
26	369	96.6	93	AAW68352	Amino acid sequenc
27	368	96.3	68	AAW17688	Stem cell mobilisi
28	365	95.5	93	AAW05879	Human macrophage-d
29	364	95.3	93	AAW05880	Macaque macrophage
30	350	91.6	69	AAW20062	Human macrophage d
31	350	91.6	69	AAW24416	Macrophage derived
32	350	91.6	69	AAW05875	Human macrophage-d
33	343	89.8	93	AAW20059	Human macrophage d
34	343	89.8	93	AAW24417	Macrophage derived
35	343	89.8	93	AAW05872	Human macrophage-d
36	258	67.5	473	AAW61797	Chimeric chemokine
37	256	67.0	68	AAW61808	Murine MDC mature
38	256	67.0	68	AAW78392	Mouse chemokine mM
39	256	67.0	68	AAW68355	Mouse chemokine pr
40	256	67.0	92	AAW59434	Mouse macrophage-d
41	256	67.0	92	AAW05876	Rat macrophage-der
42	253	66.2	81	AAW05877	Peptide #6559 enco
43	213	55.8	37	ABW39053	Human brain expres
44	213	55.8	37	AAW59705	Human bone marrow
45	213	55.8	37	AAW72285	

ALIGNMENTS

RESULT 1

AAW20061
ID AAW20061 standard; Protein: 69 AA.

XX AC AAW20061;

XX DT 11-SEP-1997 (first entry)

XX Human macrophage derived chemokine analogue.

DE DE MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW KW wound healing; angiogenesis; inflammation.

XX OS Synthetic.

XX PN WO9640923-A1.

XX PD 19-DEC-1996.

XX PF 07-JUN-1996; 96WO-US10114.

XX PR 16-NOV-1995; 95US-0558658.

XX PR 07-JUN-1995; 95US-0479620.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX DR WPI; 1997-052324/05.

XX PT Macrophage derived chemokine (MDC) and analogues - used in the

PT treatment of inflammatory diseases, MDC antibodies used to treat

PT Crohn's disease, rheumatoid arthritis, etc.

PS Claim 25; Page 84; 106pp; English.

XX A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and its analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and its analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.

XX Sequence 69 AA;

Query Match 100.0%; Score 382; DB 18; Length 69;
Best Local Similarity 100.0%; Pred. No. 9.7e-42;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPFGVLLTFRDKEICADPRVYL 60

DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPFGVLLTFRDKEICADPRVYL 60

QY 61 KMILNKLSQ 69

DB 61 KMILNKLSQ 69

RESULT 2

AAAY24415

ID AAY24415 standard; peptide; 69 AA.

XX AC AAY24415;

XX DT 24-SEP-1999 (first entry)

DE Macrophage derived chemokine analogue MDC-yl.

XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
KW inflammation; immune response; inflammatory disorder; Crohn's disease;
XX atherosclerosis; arthritis; pulmonary fibrosis.

OS Homo sapiens.

OS Synthetic.

XX PN US5932703-A.

XX PD 03-AUG-1999.

XX PF 07-JUN-1996; 96US-0660542.

XX PR 07-JUN-1996; 96US-0660542.

XX PR 07-JUN-1995; 95US-0479620.

XX PR 16-NOV-1995; 95US-0558658.

XX PA (ICOS-) ICOS CORP.

XX PI Godiska R, Gray PW;

XX DR WPI; 1999-443621/37.

XX Macrophage derived chemokine analogues useful for inhibiting

PT Macrophage derived chemokine-induced chemotaxis

XX Example 11; Column 59; 43pp; English.

XX The present sequence represents a macrophage derived chemokine (MDC)

CC analogue. MDC analogues are capable of inhibiting MDC induced

CC chemotaxis. Therefore, the MDC analogues may be used to modulate

CC inflammatory and immune responses allowing for the treatment of
CC disorders associated with excessive inflammation or overactive immune
CC responses. Inflammatory disorders which may be treated in this way
CC include Crohn's disease (manifested by chronic inflammation of the
CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.

XX Sequence 69 AA;

Query Match 100.0%; Score 382; DB 20; Length 69;
Best Local Similarity 100.0%; Pred. No. 9.7e-42;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPFGVLLTFRDKEICADPRVYL 60

DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPFGVLLTFRDKEICADPRVYL 60

QY 61 KMILNKLSQ 69

DB 61 KMILNKLSQ 69

RESULT 3

AAAY05874

ID AAY05874 standard; Protein; 69 AA.

XX AC AAY05874;

XX DT 02-AUG-1999 (first entry)

DE Human macrophage-derived C-C chemokine MDC analogue MDC-yl.

XX MDC analogue; macrophage derived chemokine; C-C chemokine; human;
KW antagonist; chemoattractant; antiproliferative; dermatological;
KW immunosuppressive; antiinflammatory; antitumor; antitumor;
KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
KW vaccine.

XX OS Homo sapiens.

OS Synthetic.

XX PN WO9915666-A2.

XX Key Location/Qualifiers

FT Misc-difference 59..60

FT /note= "Trp-Val in native MDC"

XX PD 01-APR-1999.

XX PF 28-SEP-1998; 98WO-US20270.

XX PR 28-APR-1998; 98US-0067447.

XX PR 26-SEP-1997; 97US-0939107.

XX PA (ICOS-) ICOS CORP.

XX PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;

XX DR WPI; 1999-254715/21.

XX Vertibrate Macrophage Derived Chemokines, analogues and antagonists

XX Example 11; Page 134; 147pp; English.

XX The present sequence represents synthetic analogue MDC-yl of the
CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).

CC MDC-yl consists of amino acid residues 1-69 of the MDC mature

CC polypeptide, with residues 59-60 (Trp-Val) replaced with the

CC sequence Tyr-Leu. The analogue is expected to be an antagonist of

CC MDC activity, inhibiting activity by competitively binding to the

CC receptor that recognises MDC or by forming inactive heterodimers

CC with MDC. MDC antagonists are used in claimed methods for the

CC preparation of medicaments for the suppression of the proliferation

CC of a mammalian immunodeficiency virus, for inhibiting platelet

CC aggregation in a mammal, for the treatment or palliation of lupus
CC erythematosus in a mammal, for inhibiting MDC-induced activation,
CC chemotaxis or proliferation of cells that express CCR4, for
CC inhibiting or palliating an allergic reaction in a mammal, and for
CC treating asthma.
XX
SQ Sequence 69 AA;

Query Match 100.0%; Score 382; DB 20; Length 69;
Best Local Similarity 100.0%; Pred. No. 9.7e-42;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPYL 60
|||||
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPYL 60
|||||

QY 61 KMILNLSQ 69
|||||
Db 61 KMILNLSQ 69

RESULT 4
AAO20022
ID AAO20022 standard; protein; 69 AA.
XX
AC AAO20022;
XX
DT 11-JUN-2002. (first entry)
XX
DE Human chemokine MDC protein.
XX
KW Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic;
KW antiarteriosclerotic; dermatological; antiinflammatory; antiallergic;
KW immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV;
KW AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis;
KW atheroma; atherosclerosis; organ transplant rejection; MDC.
XX
OS Homo sapiens.
XX
PN WO200204015-A1.
XX
PD 17-JAN-2002.
XX
PF 12-JUL-2001; 2001WO-US21933.
XX
PR 12-JUL-2000; 2000US-217683P.
XX
PA (GRYP-) GRYPHON SCI.
XX
PI Kochoendoerfer G, Botti P, Bradburne JA, Chen S, Cressman S;
XX WPI; 2002-268857/31.
XX
PT New polymer-modified bioactive synthetic chemokines useful in the
PT treatment of various diseases or disorders e.g. asthma
XX
PS Disclosure; Fig 10C; 176pp; English.
XX
CC The invention relates to polymer-modified bioactive synthetic chemokines
CC and to methods for their production and use. The compounds and methods of
CC the backbone of the invention are useful in the analysis and treatment of
CC various diseases states e.g. HIV and AIDS related disorders, asthma,
CC allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ
CC transplant rejection, and rheumatoid arthritis. This sequence represents
CC the human chemokine MDC protein of the invention.
XX
SQ Sequence 69 AA;

Query Match 97.9%; Score 374; DB 23; Length 69;
Best Local Similarity 97.1%; Pred. No. 1e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPYL 60
|||||
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPYL 60
|||||

QY 61 KMILNLSQ 69
|||||
Db 61 KMILNLSQ 69

RESULT 6
AAW20060
ID AAW20060 standard; protein; 70 AA.

Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPVW 60
|||||
QY 61 KMILNLSQ 69
|||||
Db 61 KMILNLSQ 69

RESULT 5
AAO14155
ID AAO14155 standard; protein; 69 AA.
XX
AC AAO14155;
XX
DT 25-APR-2002 (first entry)
XX
DE Human MDC protein.
XX
KW Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
KW asthma; allergic rhinitis; atopic dermatitis; atheroma; antiinflammatory;
KW antiasthmatic; antiallergic; dermatological; antiarteriosclerotic;
KW antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;
KW atherosclerosis; organ transplant rejection; rheumatoid arthritis.
XX
OS Homo sapiens.
XX
PN WO200204499-A1.
XX
PD 17-JAN-2002.
XX
PF 12-JUL-2001; 2001WO-US21934.
XX
PR 12-JUL-2000; 2000US-217683P.
XX
PA (GRYP-) GRYPHON SCI.
XX
PI Offord R, Gaertner H, Hartley O;
XX WPI; 2002-171703/22.
XX
PT Chemokine receptor modulator useful for treating e.g. asthma, allergic
PT rhinitis comprises a chemically modified carboxyl-terminus and/or amino
PT terminus analogs
XX
PS Example 3; Fig 2; 86pp; English.
XX
CC The present invention relates to chemokine receptor modulators, which
CC comprise a chemokine polypeptide chain modified at N-terminus with an
CC aliphatic chain and at least one amino acid derivatives and/or modified
CC at its C-terminus with an aliphatic chain or polycyclic. The modulators
CC can be used to treat diseases such as HIV infection, AIDS, asthma,
CC allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ
CC transplant rejection and rheumatoid arthritis. The present sequence is
CC the human MDC protein.
XX
SQ Sequence 69 AA;

Query Match 97.9%; Score 374; DB 23; Length 69;
Best Local Similarity 97.1%; Pred. No. 1e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPYL 60
|||||
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVLTTFRDKEICADPRVPVW 60
|||||

QY 61 KMILNLSQ 69
|||||
Db 61 KMILNLSQ 69

RESULT 6
AAW20060
ID AAW20060 standard; protein; 70 AA.

XX AC AAW20060;
 XX 11-SEP-1997 (first entry)
 XX Human macrophage derived chemokine analogue.
 XX MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
 KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
 KW wound healing; angiogenesis; inflammation.
 XX Synthetic.
 XX WO9640923-A1.
 XX 19-DEC-1996.
 XX 07-JUN-1996; 96WO-US10114.
 XX 16-NOV-1995; 95US-0558658.
 XX 07-JUN-1995; 95US-0479620.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 XX Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX Claim 25; Page 83; 106pp; English.
 XX A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX SQ Sequence 70 AA;
 Query Match 97.9%; Score 374; DB 18; Length 70;
 Best Local Similarity 97.1%; Pred. No. 1.1e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVYLLTFRDKKEICADPRVPYL 60
 DB 2 GPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVYLLTFRDKKEICADPRVPW 61
 QY 61 KMILNKLQ 69
 DB 62 KMILNKLQ 70
 RESULT 7
 AAY24413
 ID AAY24413 standard; peptide; 70 AA.
 XX AAY24413;
 XX 24-SEP-1999 (first entry)
 XX Macrophage derived chemokine analogue MDC (n+1).
 XX Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;

KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX Homo sapiens.
 OS Synthetic.
 XX US5932703-A.
 XX 03-AUG-1999.
 XX 07-JUN-1996; 96US-0660542.
 XX 07-JUN-1996; 96US-0660542.
 XX 07-JUN-1995; 95US-0479620.
 XX 16-NOV-1995; 95US-0558658.
 XX (ICOS-) ICOS CORP.
 XX Godiska R, Gray PW;
 XX WPI; 1999-443621/37.
 XX Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 XX Claim 1; Column 59; 43pp; English.
 XX The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. The MDC analogue is capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogue may be used to modulate
 CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX SQ Sequence 70 AA;
 Query Match 97.9%; Score 374; DB 20; Length 70;
 Best Local Similarity 97.1%; Pred. No. 1.1e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVYLLTFRDKKEICADPRVPYL 60
 DB 2 GPYGANNMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPGVYLLTFRDKKEICADPRVPW 61
 QY 61 KMILNKLQ 69
 DB 62 KMILNKLQ 70
 RESULT 8
 AAY05873
 ID AAY05873 standard; Protein; 70 AA.
 XX AAY05873;
 XX 02-AUG-1999 (first entry)
 XX Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
 XX MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 XX vaccine.
 XX Homo sapiens.
 OS Synthetic.
 XX WO9915666-A2.
 XX 01-APR-1999.

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XX PF 28-SEP-1998; 98WO-US20270.
XX PR 28-APR-1998; 98US-0067447.
XX PR 26-SEP-1997; 97US-0939107.
XX PA (ICOS-) ICOS CORP.
XX PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
XX DR WPI; 1999-254715/21.
XX PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists
XX PS Example 11; Page 134; 147pp; English.
XX CC The present sequence represents synthetic analogue MDC(n+1) of the
XX CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).
XX CC MDC(n+1) consists of a Leu residue following by amino acid residues
XX CC 1-69 of the MDC mature polypeptide. The analogue is expected to be
XX CC an antagonist of MDC activity, inhibiting activity by competitively
XX CC binding to the receptor that recognises MDC or by forming inactive
XX CC heterodimers with MDC. MDC antagonists are used in claimed methods
XX CC for the preparation of medicaments for the suppression of the
XX CC proliferation of a mammalian immunodeficiency virus, for inhibiting
XX CC platelet aggregation in a mammal, for the treatment or palliation
XX CC of lupus erythematosus in a mammal, for inhibiting MDC-induced
XX CC activation, chemotaxis or proliferation of cells that express CCR4,
XX CC for inhibiting or palliating an allergic reaction in a mammal, and
XX CC for treating asthma.
XX SQ Sequence 70 AA;
Query Match 97.9%; Score 374; DB 20; Length 70;
Best Local Similarity 97.1%; Pred. No. 1.1e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 2 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 61
QY 61 KMILNKLSQ 69
DB 62 KMILNKLSQ 70
RESULT 9
AAW59432
AC AAW59432;
XX 27-AUG-1998 (first entry)
DE Human chemokine protein 331D5 from CD1a+ cDNA library.
XX Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
KW degenerative condition; abnormal proliferation; regeneration;
KW degeneration; atrophy.
XX Homo sapiens.
XX Key Location/Qualifiers
XX FT Peptide 1..15
XX FT /label= signal
XX FT /note= "partial signal sequence"
XX FT Protein 16..86
XX FT /label= chemokine protein 331D5
XX PN W09811226-A2.
XX PD 19-MAR-1998.
XX PA

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PF 09-SEP-1997; 97WO-US15315.
XX 10-SEP-1996; 96US-0025724.
XX PA (SCHE ) SCHERING CORP.
XX PI Gorman DM, Hedrick JA, Zlotnik A;
XX DR WPI; 1998-207387/18.
XX DR N-PSDB; AAV34996.
XX CC Mammalian CC and CXC chemokines - useful for treatment of, e.g.
XX PT cancer and degenerative conditions
XX PS Disclosure; Page 75; 82pp; English.
XX CC This sequence represents a novel human chemokine protein, 331D5 which has
XX CC been isolated from a 90 per cent CD1a+ cDNA library and obtained by
XX CC random sequencing. Nucleic acid sequences encoding the chemokines can be
XX CC used for detection, in e.g. forensic techniques. Antibodies and other
XX CC binding agents may be used in diagnostics. The chemokines themselves are
XX CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
XX CC proliferation, regeneration, degeneration or atrophy may be treated by
XX CC the inventive compositions.
XX SQ Sequence 86 AA;
Query Match 97.9%; Score 374; DB 19; Length 86;
Best Local Similarity 97.1%; Pred. No. 1.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 18 GPGANNEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 77
QY 61 KMILNKLSQ 69
DB 78 KMILNKLSQ 86
RESULT 10
AAW20058
ID AAW20058 standard; Protein; 93 AA.
XX AC AAW20058;
XX 11-SEP-1997 (first entry)
DE Macrophage derived chemokine for treating inflammation.
XX MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX Homo sapiens.
XX Key Location/Qualifiers
XX FT Peptide 1..24
XX FT /label= sig_peptide
XX FT Protein 25..93
XX FT /label= mat_protein
XX PN W09640923-A1.
XX PD 19-DEC-1996.
XX PF 07-JUN-1996; 96WO-US10114.
XX PR 16-NOV-1995; 95US-0558658.
XX PR 07-JUN-1995; 95US-0479620.
XX PA (ICOS-) ICOS CORP.
XX

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PI Godiska R, Gray PW;
 XX WPI; 1997-052324/05.
 DR N-PSDB; AAT76529.
 XX
 XX Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 XX Claim 1; Page 73; 106pp; English.
 XX
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and it's analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 SQ Sequence 93 AA;
 Query Match 97.9%; Score 374; DB 18; Length 93;
 Best Local Similarity 97.1%; Pred. No. 1.5e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRGVYLLTFRDKETCADPRVPYL 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRGVYLLTFRDKETCADPRVPW 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 11
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 XX AC AAW62783;
 XX 24-SEP-1998 (first entry)
 DE Amino acid sequence of human STCP-1.
 XX Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX Homo sapiens.
 OS WO9824907-A1.
 PN 11-JUN-1998.
 PD 26-NOV-1997; 97WO-US21552.
 PF 03-DEC-1996; 96US-0760127.
 PR (AMGE-) AMGEN INC.
 PA Andrew DP, Chang M;
 PI WPI; 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 PT T-cells, macrophages or other immune system cells

XX Claim 1; Fig 2A-F; 96pp; English.
 XX
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 SQ Sequence 93 AA;
 Query Match 97.9%; Score 374; DB 19; Length 93;
 Best Local Similarity 97.1%; Pred. No. 1.5e-40;
 Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRGVYLLTFRDKETCADPRVPYL 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRGVYLLTFRDKETCADPRVPW 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 12
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 XX AC AAW59433;
 XX 27-AUG-1998 (first entry)
 DE Human chemokine protein 331D5.
 KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX Homo sapiens.
 OS Key Location/Qualifiers
 FH Peptide 1..24
 FT /label= signal
 FT Protein 25..93
 FT /label= 331D5
 FT /note= "chemokine protein"
 XX WO9811226-A2.
 PN 19-MAR-1998.
 PD 09-SEP-1997; 97WO-US15315.
 PF 10-SEP-1996; 96US-0025724.
 PR (SCHE) SCHERING CORP.
 PA Gorman DM, Hedrick JA, Zlotnik A;
 PI WPI; 1998-207387/18.
 DR N-PSDB; AAV34997.
 XX Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions

XX Claim 1; Page 78; 82pp; English.

PS This sequence represents a novel human chemokine protein, 33ID5.

CC Nucleic acid sequences encoding the chemokines can be used for detection,

CC in e.g. forensic techniques. Antibodies and other binding agents may be

CC used in diagnostics. The chemokines themselves are useful for treatment

CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,

CC regeneration, degeneration or atrophy may be treated by the inventive

CC compositions.

XX Sequence 93 AA;

SQ Query Match 97.9%; Score 374; DB 19; Length 93;

Best Local Similarity 97.1%; Pred. No. 1.5e-40;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKICADPRVPYL 60

DB 25 GPGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKICADPRVPW 84

QY 61 KMLNKLQSQ 69

DB 85 KMLNKLQSQ 93

RESULT 13

AAW40811

ID AAW40811 standard; Protein; 93 AA.

XX AC AAW40811;

XX 01-APR-1998 (first entry)

XX Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;

KW arthritis; inflammatory disorder; cancer; Crohn's disease;

KW atherosclerosis.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "leader peptide"

FT Protein 25..93

FT /note= "mature protein"

XX US5688927-A.

XX 18-NOV-1997.

XX 07-JUN-1995; 95US-0480449.

XX 07-JUN-1995; 95US-0480449.

XX (ICOS-) ICOS CORP.

XX Godiska R, Gray PW;

XX WPI; 1998-008038/01.

XX N-PSDB; AAT99233.

XX Antibodies specific for macrophage-derived chemokine - useful for

PT purifying or detecting the chemokine or modulating its activity

XX Claim 3; Column 21-24; 22pp; English.

XX This sequence represents the macrophage-derived chemokine (MDC). This

CC protein is used to produce the antibodies of the invention. The

CC antibodies are useful for purifying MDC polypeptides, for detecting

CC endogenous MDC in a host, and for modulating binding of MDC to its

CC receptors. The DNA encoding this sequence can be used for identifying and

CC isolating non-human MDC homologues. The MDC protein is potentially useful

CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can

CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.

XX Sequence 93 AA;

SQ Query Match 97.9%; Score 374; DB 19; Length 93;

Best Local Similarity 97.1%; Pred. No. 1.5e-40;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKICADPRVPYL 60

DB 25 GPGANNEDSVCCRDYVRYRLPLRVVYKHFYWTSDSCPRGCVLLTFRDKICADPRVPW 84

QY 61 KMLNKLQSQ 69

DB 85 KMLNKLQSQ 93

RESULT 14

AAV26175

ID AAV26175 standard; Protein; 93 AA.

XX AC AAV26175;

XX 29-SEP-1999 (first entry)

XX Macrophage-derived chemokine.

XX Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;

KW humoral response; cell-mediated response; PCR; immunostimulatory;

KW expression plasmid vector.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..24

FT /note= "signal peptide"

FT Protein 25..93

FT /note= "mature macrophage-derived chemokine"

XX W09929728-A1.

XX 17-JUN-1999.

XX 11-DEC-1998; 98WO-US26291.

XX 11-DEC-1997; 97US-0069281.

XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.

XX Devico AL, Gallo RC, Garzino-Demo A;

XX WPI; 1999-385578/32.

XX N-PSDB; AAX80630.

XX Methods of enhancing vaccine efficacy

XX Claim 6; Fig 1A(1)-1A(2); 134pp; English.

XX The present sequence is macrophage-derived chemokine. This belongs to

CC the CC class of chemokines. The efficacy of a vaccine is enhanced by

CC combining it with one or more chemokines to enhance the immune response

CC to an antigen. This can be humoral or cell-mediated immune response. The

CC purified chemokines, fragments, derivatives or analogues are

CC administered either concurrently with one or more purified antigens

CC against which an immune response is desired or within a time period

CC either before or after antigen administration. The chemokine gene is

CC isolated by PCR, and administered by constructing an expression plasmid

CC vector which can be expressed in a coordinated manner upon introduction

CC in a suitable cell. The vaccines are immunostimulatory and can be used

CC to treat microbial diseases especially HIV.

SQ Sequence 93 AA;
Query Match 97.9%; Score 374; DB 20; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.5e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPYL 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 84
QY 61 KMIILNKLSQ 69
Db 85 KMIILNKLSQ 93

RESULT 15
AAY24414
ID AAY24414 standard; Protein; 93 AA.
XX AC AAY24414;
XX 24-SEP-1999 (first entry)
XX DE Human macrophage derived chemokine.
XX KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
XX KW inflammation; immune response; inflammatory disorder; Crohn's disease;
XX KW atherosclerosis; arthritis; pulmonary fibrosis.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT Peptide 1..24
FT Protein /label= signal
FT /label= MDC
XX US5932703-A.
XX PD 03-AUG-1999.
XX PF 07-JUN-1996; 96US-0660542.
XX PR 07-JUN-1996; 96US-0660542.
XX PR 07-JUN-1995; 95US-0479620.
XX PR 16-NOV-1995; 95US-0558658.
XX PA (ICOS-) ICOS CORP.
XX PI Godliska R, Gray PW;
XX DR WPI; 1999-443621/37.
XX DR N-PSDB; AAX90162.
XX PT Macrophage derived chemokine analogues useful for inhibiting
XX PT macrophage derived chemokine-induced chemotaxis
XX PS Claim 2; Column 41-43; 43pp; English.
XX CC The present invention describes macrophage derived chemokine (MDC)
XX CC analogues which are capable of inhibiting MDC induced chemotaxis.
XX CC Therefore, the MDC analogues may be used to modulate inflammatory and
XX CC immune responses allowing for the treatment of disorders associated
XX CC with excessive inflammation or overactive immune responses. Inflammatory
XX CC disorders which may be treated in this way include Crohn's disease
XX CC (manifested by chronic inflammation of the bowel), atherosclerosis,
XX CC arthritis and pulmonary fibrosis. The present sequence represents human
XX CC MDC.
SQ Sequence 93 AA;
Query Match 97.9%; Score 374; DB 20; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.5e-40;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPYL 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDCPRPGVLLTFRDKEICADPRVPWV 84
QY 61 KMIILNKLSQ 69
Db 85 KMIILNKLSQ 93
Search completed: July 28, 2003, 04:04:46
Job time : 15.0756 secs

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:58 ; Search time 5.79832 Seconds
(without alignments)
350.133 Million cell updates/sec

Title: US-09-509-165A-31
Perfect score: 382
Sequence: 1 GPGANMEDSVCCRDYVRYR.....EICADPRVFLKMLNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues
Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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4: /cgn2.6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2.6/ptodata/1/iaa/PCrUS_COMB.pep.*
6: /cgn2.6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	382	100.0	69	2	US-08-660-542-31
2	374	97.9	70	2	US-08-660-542-30
3	374	97.9	93	1	US-08-480-449-2
4	374	97.9	93	2	US-08-660-542-2
5	374	97.9	93	4	US-09-232-878-6
6	374	97.9	93	4	US-08-479-603-2
7	374	97.9	93	5	PCrUS95-07294-2
8	350	91.6	69	2	US-08-660-542-32
9	343	89.8	93	2	US-08-660-542-25
10	141	36.9	95	4	US-09-230-637-26
11	133	34.8	89	1	US-08-208-339A-4
12	133	34.8	89	3	US-08-722-719-6
13	131	34.3	70	4	US-09-334-951-65
14	131	34.3	89	4	US-09-334-951-6
15	129	33.8	78	1	US-08-375-346A-6
16	129	33.8	78	2	US-08-467-123B-6
17	127.5	33.4	94	4	US-09-230-371A-21
18	125	32.7	68	4	US-09-141-833-5
19	123	32.2	68	2	US-08-936-387-17
20	121	31.7	68	2	US-08-936-387-18
21	121	31.7	113	4	US-09-180-077-6
22	121	31.7	113	4	US-09-180-077-11
23	119	31.2	67	4	US-09-141-833-2
24	119	31.2	68	2	US-08-936-387-1
25	119	31.2	68	2	US-08-615-232A-11
26	119	31.2	68	3	US-08-470-323-11
27	119	31.2	68	4	US-08-836-922-1

28	119	31.2	68	4	US-09-141-833-1	Sequence 1, Appl
29	119	31.2	69	3	US-07-982-759F-18	Sequence 18, Appl
30	119	31.2	69	4	US-08-836-922-2	Sequence 2, Appl
31	119	31.2	69	4	US-08-836-922-3	Sequence 3, Appl
32	119	31.2	69	4	US-08-836-922-4	Sequence 4, Appl
33	119	31.2	70	2	US-08-716-188-7	Sequence 7, Appl
34	119	31.2	73	2	US-08-936-387-13	Sequence 13, Appl
35	119	31.2	74	2	US-08-450-905B-18	Sequence 18, Appl
36	119	31.2	76	4	US-08-836-922-20	Sequence 20, Appl
37	119	31.2	90	4	US-09-230-637-40	Sequence 40, Appl
38	119	31.2	91	1	US-08-347-492B-12	Sequence 12, Appl
39	119	31.2	91	1	US-08-375-346A-5	Sequence 5, Appl
40	119	31.2	91	1	US-08-480-449-21	Sequence 21, Appl
41	119	31.2	91	2	US-08-633-682-3	Sequence 3, Appl
42	119	31.2	91	2	US-08-421-144A-8	Sequence 8, Appl
43	119	31.2	91	2	US-08-660-542-21	Sequence 21, Appl
44	119	31.2	91	2	US-08-798-143-12	Sequence 12, Appl
45	119	31.2	91	2	US-08-467-123B-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELETEXT: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31

Query Match 100.0% Score 382; DB 2; Length 69;

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Best Local Similarity 100.0%; Pred. No. 5.4e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPYL 60
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Db 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPYL 60
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QY 61 KMILNKLQ 69
    |||||||
Db 61 KMILNKLQ 69

RESULT 2
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-660-542-30

Query Match 97.9%; Score 374; DB 2; Length 70;
Best Local Similarity 97.1%; Pred. No. 6.2e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPYL 60
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Db 2 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPW 61
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QY 61 KMILNKLQ 69
    |||||||
Db 62 KMILNKLQ 70
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RESULT 3
US-08-480-449-2
; Sequence 2, Application US/08480449
; Patent No. 5688927
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,449
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32779
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-480-449-2

Query Match 97.9%; Score 374; DB 1; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPYL 60
    |||||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVYLLTFRDKEICADPRVPW 84
    |||||||
QY 61 KMILNKLQ 69
    |||||||
Db 85 KMILNKLQ 93

RESULT 4
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/08/660,542
FILING DATE: 16-NOV-1995
CLASSIFICATION: 514
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-660-542-2

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69
DB 85 KMILNKLSQ 93

RESULT 5
US-09-232-878-6
Sequence 6, Application US/09232878
Patent No. 6245332
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijian
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: US/09/232,878
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
TYPE: PRT
ORGANISM: H. sapiens
US-09-232-878-6

Query Match 97.9%; Score 374; DB 4; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69

Db 85 KMILNKLSQ 93
RESULT 6
US-08-479-603-2
Sequence 2, Application US/08479603
Patent No. 6320023
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32780
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-603-2

Query Match 97.9%; Score 374; DB 4; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMILNKLSQ 69
DB 85 KMILNKLSQ 93

RESULT 7
PCT-US95-07294-2
Sequence 2, Application PC/TUS9507294
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07294
FILING DATE: June 6, 1995
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/464,594
FILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-356
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
PCT-US95-07294-2

Query Match 97.9%; Score 374; DB 5; Length 93;
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRGCVVLLTFRDKEICADPRVPYL 60
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRGCVVLLTFRDKEICADPRVPW 84
QY 61 KMLNKLQ 69
DB 85 KMLNKLQ 93

RESULT 8
US-08-660-542-32
Sequence 32, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-0448
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-660-542-32
Query Match 91.6%; Score 350; DB 2; Length 69;
Best Local Similarity 91.3%; Pred. No. 8.5e-39;
Matches 63; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRGCVVLLTFRDKEICADPRVPYL 60
DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRGCVVLLTFRDKEICADPRVPW 60
QY 61 KMLNKLQ 69
DB 61 KMLNKLQ 69
RESULT 9
US-08-660-542-25
Sequence 25, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-0448
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids

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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..69
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: /note="The amino acid at position 24 is selected from the
; OTHER INFORMATION: group consisting of arginine, glycine, alanine,
; OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 27 is independently
; OTHER INFORMATION: selected from the group consisting of lysine, glycine,
; OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
; OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
; OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
; OTHER INFORMATION: and methionine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 30 is independently
; OTHER INFORMATION: selected from the group consisting of tyrosine,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 50 is independently
; OTHER INFORMATION: selected from the group consisting of glutamic acid,
; OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 59 is independently
; OTHER INFORMATION: selected from the group consisting of tryptophan,
; OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
; OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION:
; OTHER INFORMATION: /note="The amino acid at position 60 is independently
; OTHER INFORMATION: selected from the group consisting of valine, serine,
; OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
; OTHER INFORMATION: asparagine, glutamine, and cysteine."
; US-08-660-542-25
; Query Match 89.8%; Score 343; DB 2; Length 93;
; Best Local Similarity 91.3%; Pred. No. 1e-37;
; Matches 63; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
; QY 1 GPGANMEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGVLLTFRDKEICADPRVPYL 60
; DB 25 GPGANMEDSVCCRDYVRYRLPLRVVYKHFWTSDSCPRGVLLTFRDKEICADPRVPXX 84
; QY 61 KMLNKLQ 69
; DB 85 KMLNKLQ 93
; RESULT 10
; US-09-230-637-26
; Sequence 26, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary
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; APPLICANT: Nicholas, John
; APPLICANT: Hardwick, J. Marie
; APPLICANT: Reitz, Marvin
; TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
; TITLE OF INVENTION: Associated Herpesvirus
; FILE REFERENCE: 1107.78372
; CURRENT APPLICATION NUMBER: US/09/230,637
; PRIOR FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 60/022,591
; PRIOR FILING DATE: 1996-07-25
; PRIOR APPLICATION NUMBER: PCT US 97/12931
; PRIOR FILING DATE: 1997-07-24
; NUMBER OF SEQ ID NOS: 62
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 26
; LENGTH: 95
; TYPE: PRT
; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
; US-09-230-637-26
; Query Match 36.9%; Score 141; DB 4; Length 95;
; Best Local Similarity 39.3%; Pred. No. 3e-11;
; Matches 22; Conservative 19; Mismatches 15; Indels 0; Gaps 0;
; QY 12 CCRDYVRYRLPLRVVYKHFWTSDSCPRGVLLTFRDKEICADPRVPYLYKMLNKL 67
; DB 36 CCYGFQHPVPVQILKEWYTPSPACKPGVILLTKRGQICADPSKNWVRLQML 91
; RESULT 11
; US-08-208-339A-4
; Sequence 4, Application US/08208339A
; Patent No. 5504003
; GENERAL INFORMATION:
; APPLICANT: LI, ET AL.
; TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSER: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/208,339A
; FILING DATE: 8 MARCH 1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-77
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; US-08-208-339A-4
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;; EARLIER FILING DATE: 1995-06-06
;; EARLIER APPLICATION NUMBER: US 08/468,775
;; EARLIER FILING DATE: 1995-06-06
;; EARLIER APPLICATION NUMBER: US 08/722,719
;; EARLIER FILING DATE: 1996-09-30
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 6
;; LENGTH: 89
;; TYPE: prt
;; ORGANISM: Homo sapiens
US-09-334-951-6

Query Match 34.3%; Score 131; DB 4; Length 89;
Best Local Similarity 37.5%; Pred. No. 5.6e-10;
Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

QY 4 GANNEDSVCCRDYVRYRLPLRVVYKHFVWTSDCSPRGVLLTFRDKEICADPRVPYLKMI 63
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Db 24 GTNKE--LCCLVYTSWQIQKFIVDYSETSPQCPKPGVLLTKRGRICADPNKKWQKY 81

QY 64 LNKL 67
Db 82 ISDL 85

RESULT 15
US-08-375-346A-6
; Sequence 6, Application US/08375346A
; Patent No. 5605817
; GENERAL INFORMATION:
; APPLICANT: Coleman, Roger
; APPLICANT: Wilde, Craig G.
; APPLICANT: Seilhamer, Jeffrey J.
; TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
; TITLE OF INVENTION: ITS PRODUCTION AND USES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3330 HILLVIEW AVENUE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/375,346A
; FILING DATE: 19-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LUTHER, BARBARA J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0026 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 855-0555
; TELEFAX: (415) 855-0572
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO

; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
US-08-375-346A-6

Query Match 33.8%; Score 129; DB 1; Length 78;
Best Local Similarity 39.7%; Pred. No. 8.8e-10;
Matches 23; Conservative 14; Mismatches 19; Indels 2; Gaps 1;

QY 4 GANNEDSVCCRDYVRYRLPLRVVYKHFVWTSDCSPRGVLLTFRDKEICADPRVPYLK 61
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Db 22 GTNKE--LCCLVYTSWQIQKFIVDYSETSPQCPKPGVLLTKRGRICADPNKKWVO 77

Search completed: July 28, 2003, 04:05:37
Job time : 6.79832 secs

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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 9.42227 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165A-31

Perfect score: 382

Sequence: 1 GPGANMEDSVCCRDYVRYR.....EICADPRVPLKMLNKLQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 451899 seqs, 118759770 residues

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Minimum DB seq length: 0

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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
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- 6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
- 7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
- 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
- 9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
- 10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep1.*
- 11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep2.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
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2	374	97.9	93	11	US-09-811-088-2
3	374	97.9	93	15	US-10-314-410-2
4	369	96.6	93	10	US-09-908-599-2
5	369	96.6	93	10	US-09-908-600-2
6	256	67.0	68	15	US-10-001-221A-3
7	213	55.8	37	10	US-09-864-761-43730
8	202.5	53.0	67	15	US-10-001-221A-7
9	141	36.9	71	10	US-09-144-838-3
10	140	36.6	78	15	US-10-001-221A-6
11	133	34.8	69	11	US-09-792-793A-28
12	133	34.8	89	10	US-09-334-923A-6
13	133	34.8	89	10	US-09-334-954A-6
14	133	34.8	97	10	US-09-925-302-792
15	132	34.6	73	10	US-09-144-838-6
16	131	34.3	70	10	US-09-334-923A-65

17	131	34.3	70	10	US-09-334-954A-65
18	129	33.8	78	15	US-10-158-366-6
19	126	33.0	89	10	US-09-834-795A-34
20	126	33.0	89	12	US-09-834-794A-34
21	122	31.9	72	10	US-09-144-838-5
22	121	31.7	67	10	US-09-144-838-41
23	121	31.7	68	15	US-10-141-620-17
24	121	31.7	92	15	US-10-141-620-18
25	121	31.7	113	14	US-10-293-050-4
26	119	31.2	68	10	US-09-144-838-10
27	119	31.2	68	10	US-09-144-838-42
28	119	31.2	68	10	US-09-195-457-11
29	119	31.2	68	11	US-09-792-793A-29
30	119	31.2	91	8	US-08-927-939-21
31	119	31.2	91	10	US-09-144-838-9
32	119	31.2	91	10	US-09-834-795A-29
33	119	31.2	91	12	US-09-834-794A-28
34	119	31.2	91	12	US-09-920-137A-8
35	119	31.2	91	12	US-09-537-858-1
36	119	31.2	91	15	US-10-158-366-5
37	119	31.2	91	15	US-10-057-275-8
38	119	31.2	91	15	US-10-293-705-12
39	117	30.6	66	10	US-09-144-838-37
40	117	30.6	66	15	US-10-141-620-19
41	117	30.6	69	10	US-09-195-457-9
42	117	30.6	70	11	US-09-792-793A-24
43	117	30.6	91	15	US-10-153-064-3
44	117	30.6	92	8	US-08-927-939-19
45	117	30.6	92	10	US-09-151-450-3

ALIGNMENTS

RESULT 1

US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James J.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; FILE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; CURRENT FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 97.9%; Score 374; DB 10; Length 93;

Best Local Similarity 97.1%; Pred. No. 1.4e-39;

Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKETCADPRVPYL 60

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Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVYLLTFRDKETCADPRVPWV 84

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Qy 61 KMLNKLQ 69

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Db 85 KMLNKLQ 93

RESULT 2

US-09-811-088-2

; Sequence 2, Application US/09811088
; Patent No. US2002016046A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2

Query Match 97.9%; Score 374; DB 11; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.4e-39;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 84

QY 61 KMILNKLSQ 69
|||||
DB 85 KMILNKLSQ 93

RESULT 3
US-10-314-410-2
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE OF INVENTION: USES
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; PRIOR FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16

; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match 97.9%; Score 374; DB 15; Length 93;
Best Local Similarity 97.1%; Pred. No. 1.4e-39;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPYL 60
|||||
DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 84

QY 61 KMILNKLSQ 69
|||||
DB 85 KMILNKLSQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US20020055147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; FILE REFERENCE: PF17P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match 96.6%; Score 369; DB 10; Length 93;
Best Local Similarity 95.7%; Pred. No. 5.8e-39;
Matches 66; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPYL 60
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DB 25 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRGVVLLTFRDKEICADPRVPW 84

QY 61 KMILNKLSQ 69
|||||
DB 85 KMILNKLSQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE.

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: STATE: MD
: COUNTRY: 20850
: ZIP: US
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/908,600
: FILING DATE: 20-Jul-2001
: CLASSIFICATION: <unknown>
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 09/484,221
: FILING DATE: <unknown>
: ATTORNEY/AGENT INFORMATION:
: NAME: BROOKES, ANDERS A
: REGISTRATION NUMBER: 36,373
: REFERENCE/DOCKET NUMBER: PFI77PP
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (301) 309-8504
: TELEFAX: (301) 309-8512
: INFORMATION FOR SEQ ID NO: 2:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 93 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2

Query Match 96.6%; Score 369; DB 10; Length 93;
Best Local Similarity 95.7%; Pred. No. 5.8e-39;
Matches 66; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db 25 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPFW 84

Qy 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 6
US-10-001-221A-3
: Sequence 3, Application US/10001221A
: Publication No. US20030108515A1
: GENERAL INFORMATION:
: APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
: APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
: TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
: FILE REFERENCE: 10709/14
: CURRENT APPLICATION NUMBER: US/10/001,221A
: CURRENT FILING DATE: 2001-10-30
: PRIOR APPLICATION NUMBER: 09/834,814
: PRIOR FILING DATE: 2001-04-20
: NUMBER OF SEQ ID NOS: 7
: SOFTWARE: PatentIn version 3.1
: SEQ ID NO 3
: LENGTH: 68
: TYPE: PRT
: ORGANISM: Homo sapiens
US-10-001-221A-3

Query Match 67.0%; Score 256; DB 15; Length 68;
Best Local Similarity 61.8%; Pred. No. 6.5e-25;
Matches 42; Conservative 17; Mismatches 9; Indels 0; Gaps 0;

Qy 1 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db 1 GPYGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRQVWV 60
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Query Match 55.8%; Score 213; DB 10; Length 37;
Best Local Similarity 100.0%; Pred. No. 8.4e-20;
Matches 37; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 ANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGV 41
DB 1 ANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGV 37

RESULT 8
US-10-001-221A-7
; Sequence 7, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; CURRENT FILING DATE: 2001-04-20
; PRIOR APPLICATION NUMBER: 09/834,814
; PRIOR FILING DATE: 2001-04-20
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 7
; LENGTH: 67
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7

Query Match 53.0%; Score 202.5; DB 15; Length 67;
Best Local Similarity 55.4%; Pred. No. 3.3e-18;
Matches 36; Conservative 15; Mismatches 9; Indels 5; Gaps 1;

QY 9 DSV-----CCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYLMKI 63
DB 3 DSVSIPITCCQDYIRHPLPSRLVKBEFFWTSCRKPGVLLITVKNRDICADPRQVWVKL 62

QY 64 LNKLS 68
DB 63 LHKLS 67

RESULT 9
US-09-144-838-3
; Sequence 3, Application US/09144838A
; Patent No. US20020051996A1
; GENERAL INFORMATION:
; APPLICANT: Siani, Michael A.
; APPLICANT: Wilken, Jill
; APPLICANT: Simon, Reyna
; APPLICANT: Kent, Stephen B.H.
; TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
; FILE REFERENCE: GRFN-020/01US
; CURRENT APPLICATION NUMBER: US/09/144,838A
; CURRENT FILING DATE: 1998-08-31
; EARLIER APPLICATION NUMBER: US 60/057,620
; EARLIER FILING DATE: 1997-09-04
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 3
; LENGTH: 71
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 36.9%; Score 141; DB 10; Length 71;
Best Local Similarity 39.3%; Pred. No. 1.9e-10;
Matches 22; Conservative 19; Mismatches 15; Indels 0; Gaps 0;

QY 12 CCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYLMKI 67
DB 12 CCYGFQHQPPVQIILKENYPTSPACKPGVILLTKRGQICADPSKNNVRLMQRL 67

RESULT 10

US-10-001-221A-6
; Sequence 6, Application US/10001221A
; Publication No. US20030108515A1
; GENERAL INFORMATION:
; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
; APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
; FILE REFERENCE: 10709/14
; CURRENT APPLICATION NUMBER: US/10/001,221A
; PRIOR FILING DATE: 2001-10-30
; CURRENT FILING DATE: 2001-04-20
; PRIOR APPLICATION NUMBER: 09/834,814
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 6
; LENGTH: 78
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 36.6%; Score 140; DB 15; Length 78;
Best Local Similarity 38.0%; Pred. No. 2.8e-10;
Matches 27; Conservative 18; Mismatches 24; Indels 2; Gaps 2;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVP 58
DB 1 GPGANVEDSICCFVWVNRKIPQRLSYTRITNQCPEAVIFKKTQKQKVCADPKR 60

QY 59 YLKMLINKLSQ 69

DB 61 WVRDSMKHLDQ 71

RESULT 11

US-09-792-793A-28
; Sequence 28, Application US/09792793A
; Patent No. US20020168370A1
; GENERAL INFORMATION:
; APPLICANT: McDonald, John R.
; APPLICANT: Cogging, Phillip
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
; FILE REFERENCE: 25020-601D
; CURRENT APPLICATION NUMBER: US/09/792,793A
; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 93
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 28
; LENGTH: 69
; TYPE: PRT
; ORGANISM: homo sapien
; FEATURE:
; OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4)
US-09-792-793A-28

Query Match 34.8%; Score 133; DB 11; Length 69;
Best Local Similarity 37.5%; Pred. No. 1.9e-09;
Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

QY 4 GANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYLMKI 63

DB 4 GTNKE--LCCLVYTSWQIPQKFIQVDSYSETSPQCPKPGVILLTKRGQICADPNKKWQKY 61

QY 64 LNKI 67

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; ORGANISM: Homo sapiens
US-09-334-954A-6

Query Match          34.8%; Score 133; DB 10; Length 89;
Best Local Similarity 37.5%; Pred. No. 2.7e-09;
Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

QY   4  GAMNEDSVCCRDXYRVLPLRVVVKHFYWTSDSCPFGVLLTFRDKEICADPRVPYLKMI 63
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Db    24 GTNKE--LCCLVVTNQIPQKFIVDYSETSPQC PKGVILLTKRGRI CADPNKKWQKY 81

QY   64 LNKL 67
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Db    82 ISDL 85

RESULT 14
US-09-925-302-792
; Sequence 792, Application US/09925302
; Patent No. US20020044941A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA104
; CURRENT APPLICATION NUMBER: US/09/925,302
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05918
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 896
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 792
; LENGTH: 97
; TYPE: PRF
; ORGANISM: Homo sapiens
US-09-925-302-792

Query Match          34.8%; Score 133; DB 10; Length 97;
Best Local Similarity 37.5%; Pred. No. 2.7e-09;
Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

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Db    32 GTNKE--LCCLVVTNQIPQKFIVDYSETSPQC PKGVILLTKRGRI CADPNKKWQKY 89

QY   64 LNKL 67
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Db    90 ISDL 93

RESULT 15
US-09-144-838-6
; Sequence 6, Application US/09144838A
; Patent No. US20020051996A1
; GENERAL INFORMATION:
; APPLICANT: Siani, Michael A.
; APPLICANT: Wilken, Jill
; APPLICANT: Simon; Reyna
; APPLICANT: Kent, Stephen B.H.
; TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
; FILE REFERENCE: GRN-020/010S
; CURRENT APPLICATION NUMBER: US/09/144,838A
; CURRENT FILING DATE: 1998-08-31
; EARLIER APPLICATION NUMBER: US 60/057,620
; EARLIER FILING DATE: 1997-09-04
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 73
; TYPE: PRF
; ORGANISM: Artificial Sequence
FEATURE:
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Query Match 34.6%; Score 132; DB 10; Length 73;
Best Local Similarity 41.1%; Pred. No. 2.7e-09;
Matches 23; Conservative 14; Mismatches 19; Indels 0; Gaps 0;

12 CCRDYVRVRLPLRVVKHFYWTSDSGPRGVLLTFRDKEICADPRVPYLKMIINLKL 67
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14 CCLGYQKRPLPOVLSSWYPYSQLCPRPGVLLTKRGRCQCADPSKNWVRQLMORL 69

Search completed: July 28, 2003, 04:20:05
Job time : 10.4223 secs

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OW protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 79.1471 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-31
Perfect score: 382
Sequence: 1 GPYCANMEDSVCCRDYVRYR.....EICADPRVPYKMLNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues
Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_Main:*

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3:	/cgn2_6/ptodata/1/paa/US07_COMB.pep.*
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27:	/cgn2_6/ptodata/1/paa/US60_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	382	100.0	69	14	US-09-067-447-31
3	382	100.0	69	14	US-09-067-447-31
4	382	100.0	69	14	US-09-067-447B-31
5	382	100.0	69	19	US-09-509-165A-31
6	374	97.9	69	27	US-60-412-866-1

7	374	97.9	70	13	US-08-939-107-30
8	374	97.9	70	14	US-09-067-447-30
9	374	97.9	70	14	US-09-067-447-30
10	374	97.9	70	14	US-09-067-447B-30
11	374	97.9	70	19	US-09-509-165A-30
12	374	97.9	86	13	US-08-925-857-10
13	374	97.9	93	1	PCT-US00-00953-6
14	374	97.9	93	8	US-08-464-594-2
15	374	97.9	93	8	US-08-479-620-2
16	374	97.9	93	9	US-08-558-658-2
17	374	97.9	93	11	US-08-760-127-3
18	374	97.9	93	12	US-08-820-364-2
19	374	97.9	93	13	US-08-925-857-12
20	374	97.9	93	13	US-08-931-764-2
21	374	97.9	93	13	US-08-931-764B-2
22	374	97.9	93	13	US-08-939-107-2
23	374	97.9	93	14	US-09-067-447-2
24	374	97.9	93	14	US-09-067-447-2
25	374	97.9	93	14	US-09-067-447B-2
26	374	97.9	93	19	US-09-509-165A-2
27	374	97.9	93	19	US-09-591-992-2
28	374	97.9	93	21	US-09-712-726-2
29	374	97.9	93	21	US-09-791-537-22726
30	374	97.9	93	22	US-09-811-088-2
31	374	97.9	93	22	US-09-837-446-6
32	374	97.9	100	21	US-09-760-476-2007
33	374	97.9	100	21	US-09-760-481-204
34	374	97.9	100	26	US-10-216-245-2007
35	374	97.9	100	26	US-10-216-388-204
36	374	97.9	100	26	US-10-217-651-449
37	374	97.9	154	13	US-08-939-107-40
38	374	97.9	154	14	US-09-067-447-40
39	374	97.9	154	14	US-09-067-447-40
40	374	97.9	154	14	US-09-067-447B-40
41	374	97.9	154	19	US-09-509-165A-40
42	374	97.9	172	20	US-09-646-028-49
43	374	97.9	334	20	US-09-646-028-53
44	374	97.9	587	20	US-09-646-028-50
45	369	96.6	93	1	PCT-US00-30237-2

ALIGNMENTS

RESULT 1
US-08-939-107-31
; Sequence 31, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MFC
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/939.107
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-939-107-31

Query Match 100.0%; Score 382; DB 13; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
QY 61 KMILNKLSQ 69
|||||
DB 61 KMILNKLSQ 69

RESULT 2

US-09-067-447-31
Sequence 31, Application US/09067447
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.

REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-067-447-31

Query Match 100.0%; Score 382; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
QY 61 KMILNKLSQ 69
|||||
DB 61 KMILNKLSQ 69

RESULT 3

US-09-067-447-31
Sequence 31, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447A
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.

Query Match 100.0%; Score 382; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
|||||
DB 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
QY 61 KMILNKLSQ 69
|||||
DB 61 KMILNKLSQ 69

RESULT 4

US-09-067-447B-31
; Sequence 31, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-31

Query Match 100.0%; Score 382; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
QY 61 KMILNLSQ 69
Db 61 KMILNLSQ 69

RESULT 5
US-09-509-165A-31
; Sequence 31, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.

; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 31
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-31

Query Match 100.0%; Score 382; DB 19; Length 69;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
QY 61 KMILNLSQ 69
Db 61 KMILNLSQ 69

RESULT 6
US-60-412-866-1
; Sequence 1, Application US/60412866
; GENERAL INFORMATION:
; APPLICANT: Demotz et al.
; TITLE OF INVENTION: BIOTINYLATED SYNTHETIC CHEMOKINES
; FILE REFERENCE: 29964/38772
; CURRENT APPLICATION NUMBER: US/60/412,866
; CURRENT FILING DATE: 2002-09-23
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-412-866-1

Query Match 97.9%; Score 374; DB 27; Length 69;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 60
QY 61 KMILNLSQ 69
Db 61 KMILNLSQ 69

RESULT 7
US-08-939-107-30
; Sequence 30, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/939,107
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Cass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-939-107-30
Query Match 97.9%; Score 374; DB 13; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDSCPRPGVVLLTFRDKKEICADPRVPYL 60
Db 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDSCPRPGVVLLTFRDKKEICADPRVPV 61
QY 61 KMLNKLQ 69
Db 62 KMLNKLQ 70
RESULT 8
US-09-067-447-30
Sequence 30, Application US/09067447
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America

ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Cass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-067-447-30
Query Match 97.9%; Score 374; DB 14; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDSCPRPGVVLLTFRDKKEICADPRVPYL 60
Db 2 GPGANMEDSVCCRDYVRYRLPLRVVVKHYWTSDSCPRPGVVLLTFRDKKEICADPRVPV 61
QY 61 KMLNKLQ 69
Db 62 KMLNKLQ 70
RESULT 9
US-09-067-447-30
Sequence 30, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: ANALOGS AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER FILING DATE: 1997-09-26
EARLIER FILING DATE: 1997-09-26
EARLIER FILING DATE: 1996-06-07
EARLIER FILING DATE: 1995-11-16
EARLIER FILING DATE: 1995-06-07

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; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447B-30

Query Match          97.9%; Score 374; DB 14; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFDKKEICADPRVPYL 60
   |||||||
Db 2 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFDKKEICADPRVPW 61
   |||||||

QY 61 KMILNLSQ 69
   |||||||
Db 62 KMILNLSQ 70

RESULT 10
US-09-067-447B-30
; Sequence 30, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; APPLICANT: Deeley, Michael C.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/067,447B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-30

Query Match          97.9%; Score 374; DB 14; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFDKKEICADPRVPYL 60
   |||||||
Db 2 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFDKKEICADPRVPW 61
   |||||||

QY 61 KMILNLSQ 69
   |||||||
Db 62 KMILNLSQ 70

RESULT 11
US-09-509-165A-30
; Sequence 30, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-30

Query Match          97.9%; Score 374; DB 19; Length 70;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFDKKEICADPRVPYL 60
   |||||||
Db 2 GPGANNEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRGCVLLTFDKKEICADPRVPW 61
   |||||||

QY 61 KMILNLSQ 69
   |||||||
Db 62 KMILNLSQ 70

RESULT 12
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
```

STREET: 901 California Avenue
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICANT: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724
FILING DATE: 10-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0614K
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 86 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-925-857-10

Query Match 97.9%; Score 374; DB 13; Length 86;

Best Local Similarity 97.1%; Pred. No. 7.1e-40; Indels 0; Gaps 0;
Matches 67; Conservative 2; Mismatches 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 18 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 77
QY 61 KMILNKLSQ 69
DB 78 KMILNKLSQ 86

RESULT 13

PCT-US00-00953-6

Sequence 6, Application PC/TUS00000953
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijian
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
FILE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
FILE REFERENCE: SUN-110PRV
CURRENT FILING DATE: 2000-01-14
CURRENT APPLICATION NUMBER: PCT/US00/00953
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
PCT-US00-00953-6

Query Match 97.9%; Score 374; DB 1; Length 93;

Best Local Similarity 97.1%; Pred. No. 7.8e-40; Indels 0; Gaps 0;
Matches 67; Conservative 2; Mismatches 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84

QY 61 KMILNKLSQ 69
DB 85 KMILNKLSQ 93

RESULT 14

US-08-464-594-2
Sequence 2, Application US/08464594
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,594
FILING DATE: June 5, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-443
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 97.9%; Score 374; DB 8; Length 93;

Best Local Similarity 97.1%; Pred. No. 7.8e-40; Indels 0; Gaps 0;
Matches 67; Conservative 2; Mismatches 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYL 60
DB 25 GPGANNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPW 84
QY 61 KMILNKLSQ 69
DB 85 KMILNKLSQ 93

RESULT 15

US-08-479-620-2
Sequence 2, Application US/08479620
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive

;; CITY: Chicago
;; STATE: Illinois
;; COUNTRY: United States of America
;; ZIP: 60606-6402
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/479,620
;; FILING DATE:
;; CLASSIFICATION: 536
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.
;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/32628
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 2:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 93 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
US-08-479-620-2

Query Match 97.9%; Score 374; DB 8; Length 93;
Best Local Similarity 97.1%; Pred. No. 7.8e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 1 GPYGANMEDSVCCRDYVRYRLPLRVVYKHFWYWTSDSCPRPGVYLLTFRDKKEICADPRVPYL 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVYKHFWYWTSDSCPRPGVYLLTFRDKKEICADPRVPWV 84
Qy 61 KWLNLKLSQ 69
Db 85 KWLNLKLSQ 93

Search completed: July 28, 2003, 04:14:54
Job time : 79.1471 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 24.3529 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-31
Perfect score: 382
Sequence: 1 GPYGANNEDSVCCRDYVYR.....EICADPRVPYKMLNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues

Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Pending_Patents_AA_New:
1: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4:
2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4:
3: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4:
4: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4:
5: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep4:
6: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep4:
7: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep4:
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9: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep4:
10: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep4:
11: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep4:
12: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep4:
13: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4:
14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	374	97.9	69	12	US-10-341-931-2
2	374	97.9	93	2	PCT-US02-35606-109
3	374	97.9	93	2	PCT-US02-35606-146
4	374	97.9	93	2	PCT-US02-40891-473
5	374	97.9	93	2	PCT-US02-40891-549
6	374	97.9	93	2	PCT-US02-40891-638
7	374	97.9	93	2	PCT-US02-40891-639
8	374	97.9	93	2	PCT-US02-40891-640
9	374	97.9	93	2	PCT-US02-40891-641
10	374	97.9	93	12	US-10-314-410-2
11	374	97.9	93	12	US-10-405-027-5105
12	374	97.9	93	12	US-10-445-790-2
13	374	97.9	93	14	US-60-453-135-8659
14	374	97.9	93	14	US-60-453-050-8659
15	374	97.9	93	14	US-60-455-444-4765
16	374	97.9	93	14	US-60-465-241-4765
17	374	97.9	93	14	US-60-466-412-8659
18	374	97.9	172	12	US-10-335-394-49
19	374	97.9	334	12	US-10-335-394-53

ALIGNMENTS

RESULT 1

US-10-341-931-2
; Sequence 2, Application US/10341931
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for
; TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
; FILE REFERENCE: 00784 SRP
; CURRENT APPLICATION NUMBER: US/10/341.931
; CURRENT FILING DATE: 2003-01-14
; PRIOR APPLICATION NUMBER: 08/931,764
; PRIOR FILING DATE: 1997-09-16
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-341-931-2

Query Match 97.9% Score 374; DB 12; Length 69;
Best Local Similarity 97.1%; Pred. No. 1.6e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPYGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKETCADPRVPYL 60
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Db 1 GPYGANNEDSVCCRDYVYRPLRVVVKHFYWTSDSCPRPGVLLTFRDKETCADPRVPW 60

QY 61 KMLNKLQ 69
|||||
Db 61 KMLNKLQ 69

RESULT 2

PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.

Sequence 50, Appl
Sequence 333, App
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 422, App
Sequence 257, App
Sequence 424, App
Sequence 423, App
Sequence 425, App
Sequence 3, Appli
Sequence 3, Appli
Sequence 7, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 28, Appl
Sequence 546, App
Sequence 561, App
Sequence 562, App
Sequence 564, App
Sequence 565, App
Sequence 566, App
Sequence 567, App
Sequence 6, Appli
Sequence 2964, Ap

374 97.9 587 12 US-10-335-394-50
374 97.9 678 2 PCT-US02-40891-333
369 96.6 93 12 US-10-285-572-2
369 96.6 93 12 US-10-137-438A-2
369 96.6 93 12 US-10-406-494-2
368 96.3 677 2 PCT-US02-40891-422
368 96.3 678 2 PCT-US02-40891-257
361 94.5 676 2 PCT-US02-40891-424
361 94.5 677 2 PCT-US02-40891-423
354 92.7 676 2 PCT-US02-40891-425
256 67.0 68 10 US-09-839-445-3
256 67.0 68 12 US-10-001-221A-3
202.5 53.0 67 10 US-09-839-445-7
202.5 53.0 67 12 US-10-001-221A-7
34 150.5 39.4 77 10 US-09-839-445-6
35 140 36.6 78 12 US-10-001-221A-6
133 34.8 69 11 US-10-375-209A-28
133 34.8 89 2 PCT-US02-40891-546
133 34.8 89 2 PCT-US02-40891-561
133 34.8 89 2 PCT-US02-40891-562
133 34.8 89 2 PCT-US02-40891-564
133 34.8 89 2 PCT-US02-40891-565
133 34.8 89 2 PCT-US02-40891-566
133 34.8 89 2 PCT-US02-40891-567
133 34.8 89 12 US-10-165-233A-6
133 34.8 89 12 US-10-405-027-2964

; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 109
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db |||||||
25 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMLNKLQ 69
Db |||||||
85 KMLNKLQ 93

RESULT 3
PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 146
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db |||||||
25 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMLNKLQ 69
Db |||||||
85 KMLNKLQ 93

RESULT 4
PCT-US02-40891-473
; Sequence 473, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950

; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPYL 60
Db |||||||
25 GPGANMEDSVCCRDYVRYRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKEICADPRVPW 84
QY 61 KMLNKLQ 69
Db |||||||
85 KMLNKLQ 93

RESULT 5
PCT-US02-40891-549
; Sequence 549, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens

PCT-US02-40891-549

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKKEICADPRVPYL 60
|||||
DB 25 GPGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKKEICADPRVPW 84

QY 61 KMLINKLSQ 69
|||||
DB 85 KMLINKLSQ 93

RESULT 6

PCT-US02-40891-638
; Sequence 638, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891

; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 639
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-639

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKKEICADPRVPYL 60
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DB 25 GPGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKKEICADPRVPW 84

QY 61 KMLINKLSQ 69
|||||
DB 85 KMLINKLSQ 93

RESULT 7

PCT-US02-40891-640
; Sequence 640, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891

; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 638
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638

Query Match 97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKKEICADPRVPYL 60
|||||
DB 25 GPGANNEDSVCCRDYVRLPLRVVVKHFYWTSDSCPRGCVLLTFRDKKEICADPRVPW 84

QY 61 KMLINKLSQ 69
|||||
DB 85 KMLINKLSQ 93

RESULT 7

PCT-US02-40891-639
; Sequence 639, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT

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; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

Query Match          97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPVGLLTFRDKEICADPRVPYL 60
    |||||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPVGLLTFRDKEICADPRVPW 84

Qy 61 KMILNKLQ 69
    |||||||
Db 85 KMILNKLQ 93

RESULT 9
PCT-US02-40891-641
; Sequence 641, Application PC/TUS02/40891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 641
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-641

Query Match          97.9%; Score 374; DB 2; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPVGLLTFRDKEICADPRVPYL 60
    |||||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPVGLLTFRDKEICADPRVPW 84

Qy 61 KMILNKLQ 69
    |||||||
Db 85 KMILNKLQ 93
```

```
RESULT 10
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.
; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
; PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410
; CURRENT FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/811,088
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: US 09/712,726
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: US 08/820,364
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 09/757,421
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: US 08/843,652
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 08/843,651
; PRIOR FILING DATE: 1997-04-16
; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          97.9%; Score 374; DB 12; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPVGLLTFRDKEICADPRVPYL 60
    |||||||
Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHFYWTSDCPRPVGLLTFRDKEICADPRVPW 84

Qy 61 KMILNKLQ 69
    |||||||
Db 85 KMILNKLQ 93

RESULT 11
US-10-405-027-5105
; Sequence 5105, Application US/10405027
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS806P1
; CURRENT APPLICATION NUMBER: US/10/405,027
; CURRENT FILING DATE: 2003-04-07
; PRIOR APPLICATION NUMBER: 60/369,608
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: 60/376,175
; PRIOR FILING DATE: 2002-04-30
; NUMBER OF SEQ ID NOS: 5810
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5105
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-027-5105

Query Match          97.9%; Score 374; DB 12; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
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Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 12
US-10-445-790-2
; Sequence 2, Application US/10445790
; GENERAL INFORMATION:
; APPLICANT: Devico, Anthony L.
; APPLICANT: Garzino, Alfredo
; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
; FILE REFERENCE: 4115-109 CIP DIV
; CURRENT APPLICATION NUMBER: US/10/445,790
; CURRENT FILING DATE: 2003-05-27
; PRIOR APPLICATION NUMBER: PCT/US98/26291
; PRIOR FILING DATE: 1998-12-11
; PRIOR APPLICATION NUMBER: US 09/591,992
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/186,416
; PRIOR FILING DATE: 2000-03-02
; PRIOR APPLICATION NUMBER: US 60/069,281
; PRIOR FILING DATE: 1997-12-11
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2

Query Match 97.9%; Score 374; DB 12; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 13
US-60-453-135-8659
; Sequence 8659, Application US/60453135
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: IAKOUBOVA, Olga
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001456
; CURRENT APPLICATION NUMBER: US/60/453,135
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-135-8659

Query Match 97.9%; Score 374; DB 14; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 14
US-60-453-050-8659
; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: LUKE, May
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001457
; CURRENT APPLICATION NUMBER: US/60/453,050
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 82762
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8659
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-050-8659

Query Match 97.9%; Score 374; DB 14; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

RESULT 15
US-60-455-444-4765
; Sequence 4765, Application US/60455444
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001455
; CURRENT APPLICATION NUMBER: US/60/455,444
; CURRENT FILING DATE: 2003-03-18
; NUMBER OF SEQ ID NOS: 50986
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4765
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-455-444-4765

Query Match 97.9%; Score 374; DB 14; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.3e-40;
Matches 67; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPYL 60
|||||
Db 25 GPGANNEDSVCCRDYVYRPLRVVVKHFYWTSDCPRPGVLLTFRDKKEICADPRVPW 84
|||||

Qy 61 KMILNLSQ 69
|||||
Db 85 KMILNLSQ 93
|||||

Search completed: July 28, 2003, 04:18:50
Job time : 24.3529 secs

Result No.	Query			Length	DB	ID	Description
	Score	Match					
1	129	33.8	92	2	I52322	macrophage inflamm	
2	119	31.2	91	1	A28815	monocyte chemoattr	
3	119	31.2	92	2	A32393	macrophage inflamm	
4	117	30.6	91	1	A46539	monocyte chemoattr	
5	117	30.6	92	2	A30574	macrophage inflamm	
6	111.5	29.2	92	1	A31767	macrophage inflamm	
7	110.5	28.9	92	2	C30552	macrophage inflamm	
8	110	28.8	93	2	B35673	LD78-beta protein	
9	105	27.5	99	2	JC5295	monocyte chemotact	
10	104	27.2	109	2	A54678	monocyte chemotact	
11	103	27.0	120	2	I48147	monocyte chemoattr	
12	97.5	25.5	148	1	S07723	immediate-early se	
13	95	24.9	99	2	JC2417	monocyte chemoattr	
14	93.5	24.5	116	2	I49555	gene C10 protein -	
15	93	24.3	99	2	A60299	monocyte chemoattr	
16	92.5	24.2	92	2	I46730	immune activation	
17	90.5	23.7	148	1	A30209	PDGF-inducible JE	
18	88.5	23.2	99	1	A39296	monocyte chemoattr	
19	88.5	23.2	99	2	JC2336	monocyte chemoattr	
20	87	22.8	97	2	JC4912	eotaxin precursor	
21	85	22.3	50	2	C60407	monocyte adherence	
22	81.5	21.3	99	2	JC2136	monocyte chemoattr	
23	81	21.2	96	2	I48099	eotaxin precursor	
24	80	20.9	96	2	JC2478	eotaxin precursor	
25	78.5	20.5	120	2	JE0177	lymphocyte and mon	
26	76	19.9	114	1	ETHUL	lymphoractin precu	
27	75	19.6	96	2	A37236	I-309 protein precu	
28	71.5	18.7	92	2	S24236	TCA3 protein - mou	
29	71.5	18.7	125	2	I46857	monocyte chemoattr	

A;Molecule type: mRNA

A;Residues: 1-91 <SH1>

A:Gene: GDB:SCYA3
A:Cross-references: GDB:l120368; OMIM:182283
A:Map position: 17q11-17q21
C:Superfamily: macrophage inflammatory protein
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
F:33-57,34-73/Disulfide bonds: #status predicted

Query Match 30.6%; Score 117; DB 2; Length 92;
Best Local Similarity 31.0%; Pred. No. 3,4e-07;
Matches 18; Conservative 16; Mismatches 24; Indels 0; Gaps 0;

QY 10 SVCCRDYVRYRLPLRVKVFHYWTSDSCPRGCVLLTFRDKKEICADPRVPLKMLINKL 67
: || | :: | | | : || | | : || | | | : || | | : || |
Db 31 TACCFYSYTPQNFIADYFETSSQCSKPGVIFLTKRSRQVCADPSEEWQRYVSDL 88

RESULT 6
A31767
macrophage inflammatory protein 1-beta precursor [validated] - human
N:Alternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation g
protein 2 (Act-2); T-cell activation protein gamma
C:Species: Homo sapiens (man)
C:Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
C:Accession: JH0319; A40978; A31767; A37411; B30574; B43817; D30552
R:Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pe
Mol. Immunol. 27, 1091-1102, 1990
A:Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
A:Reference number: JH0319; MUID:91061800; PMID:2247088
A:Accession: JH0319
A:Status: translation not shown
A:Molecule type: DNA
A:Residues: 1-92 <BAI>
A:Cross-references: GB:X53682; NID:934217; PIDN:CAA37723.1; PID:934218
R:Experimental source: natural killer cell, strain CD3-CD2+, F5, 5F1IE5
R:Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarr, J.R.; Seanez, H.N.; Leonard, W.
J. Biol. Chem. 266, 17531-17536, 1991
A:Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsi
A:Reference number: A40978; MUID:91373378; PMID:1894635
A:Accession: A40978
A:Molecule type: DNA
A:Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
A:Cross-references: GB:M69201; NID:gl78021
A:Note: 15-Ala was also found
R:Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
A:Title: Identification, cloning, and characterization of an immune activation gene.
A:Reference number: A31767; MUID:89071764; PMID:2462251
A:Accession: A31767
A:Molecule type: mRNA
A:Residues: 1-92 <LIP>
A:Cross-references: GB:J04130; NID:gl78017; PIDN:AAA51576.1; PID:gl78018
R:Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
A:Title: Isolation and characterization of a cDNA encoding a putative cytokine which
A:Reference number: A37411; MUID:89325421; PMID:2568930
A:Accession: A37411
A:Molecule type: mRNA
A:Residues: 1-92 <CHA>
A:Cross-references: GB:X16166; NID:G32035; PIDN:CAA34291.1; PID:g32036
R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1582-1590, 1989
A:Title: Mitogenic activation of human T cells induces two closely related genes whic
A:Reference number: A30574; MUID:89140347; PMID:2521882
A:Accession: B30574
A:Molecule type: mRNA
A:Residues: 1-19, 'L', 21-92 <ZIP>
A:Cross-references: GB:M25316; NID:G602454; PIDN:AAA57256.1; PID:G602455
R:Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A:Title: A novel polypeptide secreted by activated human T lymphocytes.
A:Reference number: A45817; MUID:90038522; PMID:2809212
A:Accession: B45817

Db 32 TACCFSYTRQIPQNFADYFETSSQSPSVIFLTKRGQVCA DPSEEWQKVYSDL 89

RESULT 9

JC5295

monocyte chemotactic protein-2 precursor - human

C:Species: Homo sapiens (man)

C:Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000

C:Accession: JC5295

R:Van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Damme, P.

Biochem. Biophys. Res. Commun. 231, 726-730, 1997

A:Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression of

A:Reference number: JC5295; MUID:97224420; PMID:9070881

A:Accession: JC5295

A:Molecule type: mRNA

A:Residues: 1-99 <VAN>

A:Cross-references: GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924938

A:Experimental source: bone marrow

C:Comment: This protein belongs to the beta-chemokine family which is one of the major H

tis and in tumor biology, and contribute to the trafficking and recruitment of the respon

C:Genetics:

A:Gene: mcp-2

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-95/Product: monocyte chemotactic protein-2 #status predicted <MAT>

Query Match

Best Local Similarity 27.5%; Score 105; DB 2; Length 99;

Matches 23; Conservative 16; Mismatches 29; Indels 6; Gaps 2;

QY 2 PYGANMEDSV-----CCRDYVRYRLP-LRVVKHFYWTSDSCPRGCVLLTFRDKEICADP 55

Db 19 PGCLAQPDSPVITPCFNVINKPIQLRLESYTRITNIQCPKEAVIFKTRQKEVCADP 78

QY 56 RVPYKMLNKLKLSQ 69

Db 79 KERWRDVKMKHLDO 92

RESULT 10

A54678

monocyte chemotactic protein 3 precursor - human

N:Alternate names: monocyte chemoattractant protein MCP-3

C:Species: Homo sapiens (man)

C:Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999

C:Accession: A54678; JCI478; S32222

R:Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.

Genomics 21, 403-408, 1994

A:Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the

A:Reference number: A54678; MUID:94375065; PMID:7916328

A:Accession: A54678

A:Molecule type: DNA

A:Residues: 1-109 <OPD>

A:Cross-references: GB:X72309

R:Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.

Biochem. Biophys. Res. Commun. 191, 535-542, 1993

A:Title: Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and

A:Reference number: JCI478; MUID:93213290; PMID:8461011

A:Accession: JCI478

A:Molecule type: mRNA

A:Residues: 1-109 <OPD>

A:Cross-references: GB:X72308; GB:S57464; NID:g3928270; PIDN:CAA51055.1; PID:g313708

R:Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux,

submitted to the EMBL Data Library, March 1993

A:Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattract

A:Reference number: S32222

A:Accession: S32222

A:Molecule type: mRNA

A:Residues: 1-109 <MIN>

A:Cross-references: EMBL:X71087; NID:g288396; PIDN:CAA50405.1; PID:g288397

C:Comment: This protein induces proteinase secretion and chemotaxis by macrophages and m

C:Genetics:

A:Gene: SCYA7; SCYA6; MCP-3

A:Cross-references: GDB:138473; OMIM:158106

A:Map position: 17q11-17q12

A:Introns: 36/1: 75/2

C:Superfamily: macrophage inflammatory protein

C:Keywords: cytokine; glycoprotein; inflammation

F:1-33/Domain: signal sequence #status predicted <SIG>

F:34-109/Product: monocyte chemotactic protein 3 #status predicted <MAT>

F:39/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match

Best Local Similarity 27.2%; Score 104; DB 2; Length 109;

Matches 23; Conservative 13; Mismatches 31; Indels 2; Gaps 2;

QY 2 PYGANMEDSVCCRDYVRYRLP-LRVVKHFYWTSDSCPRGCVLLTFRDKEICADPRVPYL 60

Db 35 PVGIN-TSITCCYRFINKKIPKQRLSYRTTSSHCPRQEAIVFTLNKEVCADPTQKWV 93

QY 61 KMLNKLKLSQ 69

Db 94 QDFMKHLDK 102

RESULT 11

I48147

monocyte chemoattractant protein-1 - guinea pig

C:Species: Cavia porcellus (guinea pig)

C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999

C:Accession: I48147

R:Yoshimura, T.

J. Immunol. 150, 5025-5032, 1993

A:Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression

A:Reference number: I48147; MUID:93267104; PMID:8496603

A:Accession: I48147

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-120 <RES>

A:Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821

C:Genetics:

A:Gene: MCP-1

C:Superfamily: macrophage inflammatory protein

Query Match

Best Local Similarity 27.0%; Score 103; DB 2; Length 120;

Matches 24; Conservative 15; Mismatches 26; Indels 4; Gaps 3;

QY 2 PYGANMEDSVCCRDYVRYRLP-LRVVKHF-YWTSDSCPRGCVLLTFRDKEICADPRVPYL 60

Db 25 PDGVN--TPCCYTFNK-QIPLKRVGYERTSSRCPCQEAIVFTLNKEVCADPTQKWV 81

QY 61 KMLNKLKLSQ 69

Db 82 QDYIAKLQ 90

RESULT 12

S07723

immediate-early serum-responsive protein JE precursor - rat

N:Alternate names: monocyte chemoattractant protein-1

C:Species: Rattus norvegicus (Norway rat)

C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999

C:Accession: S07723; JN0128

R:Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.

Nucleic Acids Res. 18, 23-34, 1990

A:Title: Analysis of the rat JE gene promoter identifies an AP-1 binding site essenti

A:Reference number: S07723; MUID:90174947; PMID:2106664

A:Accession: S07723

A:Molecule type: DNA

A:Residues: 1-148 <TIM>

A:Cross-references: EMBL:X17053; NID:g55530; PIDN:CAA34901.1; PID:g55531

R:Yoshimura, T.; Takeya, M.; Takahashi, K.

Biochem. Biophys. Res. Commun. 174, 504-509, 1991

A:Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its

A:Reference number: JN0128; MUID:91128376; PMID:1704226

A:Accession: JN0128
A:Molecule type: mRNA
A:Residues: 1-148 <YOSA>

A:Cross-references: GB:M57441; NID:g205333; PIDN:AAA63496.1; PID:g205334
A:Experimental source: spleen cells
A:Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue 6
A:Genetics:

C:Introns: 26/1; 65/2

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-148/Product: immediate-early serum-responsive protein JE #status predicted <MAT>

Query Match 25.5%; Score 97.5; DB 1; Length 148;

Best Local Similarity 33.9%; Pred. No. 0.00013;

Matches 20; Conservative 12; Mismatches 26; Indels 1; Gaps 1;

OY 12 CCRDYYRRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYKMLNKLQ 69

DB 34 CCYSTGKMPMSRLNRYKRTSSRCPEAVVFTKLKEICADPNKEWQYIRKLDQ 92

RESULT 13

JC2417

monocyte chemoattractant protein-2 precursor - pig

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999

C:Accession: JC2417

R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.

Biochem. Biophys. Res. Commun. 205, 148-153, 1994

A:Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis

A:Reference number: JC2417; MUID:95091716; PMID:7999015

A:Accession: JC2417

A:Molecule type: mRNA

A:Residues: 1-99 <HOS>

A:Cross-references: GB:Z48480; NID:g683718; PIDN:CAA88371.1; PID:g683719

A:Experimental source: corpus luteum

C:Superfamily: macrophage inflammatory protein

F:1-23/Domain: signal sequence #status predicted <SIG>

F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match 24.9%; Score 95; DB 2; Length 99;

Best Local Similarity 31.3%; Pred. No. 0.00018;

Matches 21; Conservative 15; Mismatches 25; Indels 6; Gaps 2;

OY 9 DSV-----CCRDYYRRLPLRVVKKHF-YWTSDSCPRPGVLLTFRDKKEICADPRVPYKLM 62

DB 26 DSVSIPITCCGLVNGKIPFKLESYTRITNSQCPEAVIEKTRADKEVCADPQCKQYQN 85

OY 63 ILNKLQ 69

DB 86 SMKLLDQ 92

RESULT 14

I49555

gene C10 protein - mouse

C:Species: Mus musculus (house mouse)

C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999

C:Accession: I49555

R:Orlowski, A.; Berger, M.S.; Prystowsky, M.B.

Cell Regul. 2, 403-412, 1991

A:Title: Novel expression pattern of a new member of the MIP-1 family of cytokine-like

A:Reference number: I49555; MUID:91370083; PMID:1832565

A:Accession: I49555

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-116 <RES>

A:Cross-references: GB:M58004; NID:g192243; PIDN:AAA37329.1; PID:g192244

C:Genetics:

A:Gene: C10

C:Superfamily: macrophage inflammatory protein

Query Match 24.5%; Score 93.5; DB 2; Length 116;

Best Local Similarity 30.0%; Pred. No. 0.00033;

Matches 18; Conservative 16; Mismatches 25; Indels 1; Gaps 1;

OY 10 SVCCRDYYRRLPLRVVKKHFYWTSDSCPRPGVLLTFRDKKEICADPRVPYKMLNKLQ 69

DB 48 SDCFSVAT-OIPCKRFYIYPTSGGCIKPGIIFISRRGTQVADPSDRVQRCSTLTKQ 106

RESULT 15

A60299

monocyte chemoattractant protein 1 precursor - human

N:Alternate names: GDCF-1; glioma-derived monocyte chemoattractant factor 1; MCAF; MCP-2

C:Contains: glioma-derived chemotactic factor 2 (GDCF-2)

C:Species: Homo sapiens (man)

C:Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999

C:Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488

R:Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.

Biochem. Biophys. Res. Commun. 169, 346-351, 1990

A:Title: Structure of human monocyte chemoattractant protein gene and its regulation by T

A:Reference number: A35474; MUID:90290466; PMID:2357211

A:Accession: A35474

A:Molecule type: DNA

A:Residues: 1-99 <SHY>

A:Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124

R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.

Mol. Cell. Biol. 9, 4687-4695, 1989

A:Title: The human homolog of the JE gene encodes a monocyte secretory protein.

A:Reference number: A33476; MUID:90097880; PMID:2513477

A:Accession: A33476

A:Molecule type: mRNA

A:Residues: 1-99 <ROL>

A:Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; I

R:Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.

FEBS Lett. 244, 487-493, 1989

A:Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning

A:Reference number: S03339; MUID:89153605; PMID:2465924

A:Accession: S03339

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-99 <YOS>

A:Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514

A:Experimental source: glioma cell line U-105MG

R:Yoshimura, T.; Leonard, E.J.

Adv. Exp. Med. Biol. 305, 47-56, 1991

A:Title: Human monocyte chemoattractant protein-1 (MCP-1).

A:Reference number: I51841; MUID:92095166; PMID:1661560

A:Accession: I51841

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-99 <YOS>

A:Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868

R:Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.

Int. J. Cancer 45, 795-797, 1990

A:Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotac-1

-1/MCAF).

A:Reference number: A60299; MUID:90216082; PMID:2182547

A:Accession: A60299

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-99 <BOT>

R:Frutani, Y.; Nomura, H.; Notake, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, C

Biochem. Biophys. Res. Commun. 159, 249-255, 1989

A:Title: Cloning and sequencing of the cDNA for human monocyte chemoattractant and acti-a

A:Reference number: A32300; MUID:89165862; PMID:2923622

A:Accession: A32300

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-99 <FUR>

A:Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163

R:Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz

Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989

A:Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative

A:Reference number: A32396; MUID:89184525; PMID:2648385
 A:Accession: A32396
 A:Molecule type: protein
 A:Residues: 'X',25-99 <ROB>
 R:Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
 Biochem. Biophys. Res. Commun. 167, 904-909, 1990
 A:Title: Identification of the monocyte chemotactic protein from human osteosarcoma cell
 A:Reference number: A34561; MUID:90211336; PMID:2322286
 A:Accession: A34561
 A:Molecule type: protein
 A:Residues: 29-33,'XX',36-52;82-92 <DEC>
 R:Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
 Mol. Cell. Biochem. 126, 61-68, 1993
 A:Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular endoth
 A:Reference number: I57488; MUID:94150478; PMID:8107690
 A:Accession: I57488
 A:Status: translated from GB/EMBL/DDBT
 A:Molecule type: mRNA
 A:Residues: 1-99 <LIY>
 A:Cross-references: GB:S69738; NID:g545464; PIDN:AAB29926.1; PID:g545465
 R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
 Chinese J. Microbiol. Immunol. 14, 29-32, 1994
 A:Title: The PCR cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1)
 A:Reference number: JCI096
 A:Accession: JCI096
 A:Molecule type: mRNA
 A:Residues: 24-28,'Q',30-99 <YEQ>
 C:Genetics:
 A:Gene: GDB:SCYA2
 A:Cross-references: GDB:125279; OMIM:158105
 A:Map position: l7q11.2-17q12
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>
 F:29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MA
 F:24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experime
 F:37/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 24.3%; Score 93; DB 2; Length 99;
 Best Local Similarity 27.0%; Pred. No. 0.00032;
 Matches 20; Conservative 18; Mismatches 30; Indels 6; Gaps 2;

QY	2	PYGANNEDSV-----CCRDYVRYRLPL-RVVKHFYWTSDCPRPGVVLTLFRDKKEICADP	55
Db	19	PQGLAQPDALNAPVTCCTCYNETNFKISVQRLASYRITSSKCPKEAVIFKTIYAKEICADP	78
QY	56	RVPLKMLNKLQSQ	69
Db	79	KQKWQDSMDHLDK	92

Search completed: July 28, 2003, 04:15:51
 Job time : 7.81303 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 3.62395 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165a-31

Perfect score: 382

Sequence: 1 GPGANMEDSVCCRDYVR.....EICADPRVPLKMLNLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	374	97.9	93	1 SY22_HUMAN	O00626 homo sapien
2	256	67.0	92	1 SY22_MOUSE	O88430 mus musculus
3	133	34.8	89	1 SY18_HUMAN	P55774 h small ind
4	129	33.8	92	1 SY03_RAT	P50229 rattus norv
5	125.5	32.9	90	1 SY04_CHICK	O90826 gallus gall
6	121	31.7	113	1 SY15_HUMAN	Q16663 homo sapien
7	119	31.2	91	1 SY05_HUMAN	P13501 homo sapien
8	119	31.2	92	1 SY03_MOUSE	P10855 mus musculus
9	117.5	30.8	104	1 SY12_MOUSE	Q62401 mus musculus
10	117	30.6	91	1 SY05_MOUSE	P30882 mus musculus
11	117	30.6	92	1 SY03_HUMAN	P10147 homo sapien
12	117	30.6	92	1 SY05_RAT	P50231 rattus norv
13	116.5	30.5	92	1 SY04_RAT	P50230 rattus norv
14	114	29.8	93	1 SY14_HUMAN	Q16627 homo sapien
15	113.5	29.7	94	1 SY17_HUMAN	Q92583 homo sapien
16	113	29.6	94	1 VMI2_KSHV	Q98157 kaposi's sa
17	111.5	29.2	92	1 SY01_HUMAN	P13236 h small ind
18	111	29.1	91	1 SY05_CAVPO	P17272 cavia porce
19	110.5	28.9	92	1 SY04_MOUSE	P14097 mus musculus
20	110	28.8	93	1 SY12_HUMAN	P16619 homo sapien
21	106.5	27.9	70	1 REG1_BOVIN	P82943 bos taurus
22	106	27.7	91	1 SY05_BOVIN	O97919 bos taurus
23	105	27.5	99	1 SY08_HUMAN	P80075 homo sapien
24	104	27.2	99	1 SY07_HUMAN	P80098 homo sapien
25	103	27.0	120	1 SY02_CAVPO	Q08782 cavia porce
26	100.5	26.3	98	1 SY19_HUMAN	Q99731 homo sapien
27	97.5	25.5	98	1 SY13_HUMAN	O99616 homo sapien
28	97.5	25.5	108	1 SY19_MOUSE	O70460 mus musculus
29	97.5	25.5	119	1 SY24_MOUSE	O91kc0 mus musculus
30	97.5	25.5	148	1 SY02_RAT	P14844 rattus norv
31	96	25.1	120	1 SY23_HUMAN	P55773 homo sapien
32	95	24.9	99	1 SY08_PIG	P49873 sus scrofa
33	94	24.6	94	1 SY26_HUMAN	Q9y258 homo sapien

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P.,			
RA	Levitin D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Macrophage;			
RC	MEDLINE=97460118; PubMed=9312138;			
RA	Chang M.-S., McIninch J., Elias C. III, Manthey C.L., Grosshans D.,			
RA	Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99425270; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,			
RA	Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,			
RA	Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,			
RA	Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Pancreas, and Spleen;			
RC	Strausberg R.;			
RL	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RN	[5]			
RP	RECEPTOR INTERACTION			
RX	MEDLINE=98104168; PubMed=9430724;			
RA	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,			
RA	Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

P27784 mus musculus
P13500 homo sapien
Q9ymn4 macaca fasc
P46632 oryctolagus
O89093 mus musculus
P10148 mus musculus
O00175 homo sapien
Q09141 bos taurus
P28291 bos taurus
P51671 homo sapien
P52203 canis fami
Q29288 sus scrofa

34 93.5 24.5 116 1 SY06_MOUSE
35 93 24.3 99 1 SY02_HUMAN
36 93 24.3 99 1 SY02_MACFA
37 92.5 24.2 92 1 SY04_RABIT
38 91 23.8 97 1 SY20_MOUSE
39 90.5 23.7 148 1 SY02_MOUSE
40 89.5 23.4 119 1 SY24_HUMAN
41 89 23.3 99 1 SY08_BOVIN
42 88.5 23.2 99 1 MCPA_BOVIN
43 87.5 22.9 97 1 EOTA_HUMAN
44 85 22.3 101 1 SY02_CANFA
45 83.5 21.9 50 1 SY05_PIG

```

RT Chemokine receptor 4.;
RL J. Biol. Chem. 273:1764-1768(1998).
CC -!- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL; U83171; AAB58360.1; -
DR EMBL; U83239; AAB53372.1; -
DR EMBL; AC004382; AAC24306.1; -
DR EMBL; BC027952; AAH27952.1; -
DR HSSP; Q98157; ICM9.
DR Genew; HGNC:10621; SCYA22.
DR MIM; 602957; -
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT SIGNAL 1 24
FT CHAIN 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 97.9%; Score 374; DB 1; Length 93;
Best Local Similarity 97.1%; Pred. No. 2.1e-40; Indels 0; Gaps 0;
Matches 67; Conservative 2; Mismatches 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRPGVVLTFRDKKEICADPRVPYL 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRPGVVLTFRDKKEICADPRVPW 84
QY 61 KMLNKLQS 69
Db 85 KMLNKLQS 93

RESULT 2
SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
GN SCYA22 OR ABCD1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
OC NCBI_TaxID=10090;

```

```

RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardoll E., Sallusto F., Speletas M., Ruedl C.,
RA Shmizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -!- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC -----
DR EMBL; AF052505; AAC40200.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;

Query Match 67.0%; Score 256; DB 1; Length 92;
Best Local Similarity 61.8%; Pred. No. 1.6e-25;
Matches 42; Conservative 17; Mismatches 9; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKKHYFTSDSCPRPGVVLTFRDKKEICADPRVPYL 60
Db 25 GPGANVEDSICCDYIRHPLPSRLVKEFFWTSKSRKPGVVLITVKRNDICADPRVWV 84
QY 61 KMLNKLKS 68
Db 85 KLLHLKLS 92

RESULT 3
SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;

```

RN [1] SEQUENCE FROM N.A.
 RP Li H., Ruben S.;
 RA "Macrophage inflammatory protein-3 and -4";
 RL Patent number US5504003, 02-APR-1996.
 RN [2]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC TISSUE=Aorta, and Lung;
 RX MEDLINE=97376836; PubMed=9233607;
 RA Hieshima K., Inai T., Baba M., Shoudai K., Ishizuka K.,
 RA Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
 RA Miura K., Odenakker G., van Damme J., Yoshie O., Nomiyaama H.;
 RT "A novel human CC chemokine PARC that is most homologous to
 RT macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
 RT T lymphocytes, but not for monocytes.";
 RL J. Immunol. 159:1140-1149(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98230488; PubMed=9570561;
 RA Kodelja V., Mueller C., Politz O., Haki N., Orfanos C.E., Goerd S.;
 RT "Alternative macrophage activation-associated CC-chemokine-1, a novel
 RT structural homologue of macrophage inflammatory protein-1 alpha with
 RT a Th2-associated expression pattern.";
 RL J. Immunol. 160:1411-1418(1998).
 RN [4]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE=97275308; PubMed=9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and characterization
 RT of novel chemokines using the WorldWideWeb and expressed sequence tag
 RT databases.";
 RL J. Leukoc. Biol. 61:545-550(1997).
 RN [5]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
 RC TISSUE=Dendritic cell;
 RX MEDLINE=97336102; PubMed=9192897;
 RA Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
 RA Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
 RA Figdor C.G.;
 RT "A dendritic-cell-derived C-C chemokine that preferentially attracts
 RT naive T cells";
 RL Nature 387:713-717(1997).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99168908; PubMed=10049593;
 RA Tasaki Y., Fukuda S., Iio M., Miura R., Inai T., Sugano S., Yoshie O.,
 RA Hughes A.L., Nomiyaama H.;
 RT "Chemokine PARC gene (SCYA18) generated by fusion of two
 RT MIP-1alpha/LD78alpha-like genes.";
 RL Genomics 55:353-357(1999).
 RN [7]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RX MEDLINE=99189237; PubMed=10087196;
 RA Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
 RA Neote K., McCall S.R.;
 RT "Genomic organization and biological characterization of the novel
 RT human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18.";
 RL Genomics 56:296-302(1999).
 RN [8]
 RP SEQUENCE FROM N.A.
 RA Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerd S.;
 RT "The genomic locus for the AMAC-1 gene contains possible pseudo-exons
 RT within the first intron sequence.";
 RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
 CC MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
 CC INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
 CC TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES.
 CC HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
 CC AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
 CC IMMUNITY RESPONSES.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,

CC PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
 CC AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
 CC DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
 CC PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
 CC DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
 CC -1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
 CC IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOID
 CC EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
 CC IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
 CC MONOCYTIC U937 CELLS BY PHORBOL MYRISTATE ACETATE (PMA).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 DR EMBL; AB000221; BAA21670.1; -
 DR EMBL; Y13710; CAA74039.1; -
 DR EMBL; AB012113; BAA34368.1; -
 DR EMBL; AF082214; AAC32287.1; -
 DR EMBL; AF082212; AAC32287.1; JOINED.
 DR EMBL; AF082213; AAC32287.1; JOINED.
 DR EMBL; AF111198; AAD30390.1; -
 DR HSP; P13236; IHUM.
 DR Genew; HGNC:10616; SCYA18.
 DR MIM; 603757; -
 DR InterPro; IPR000827; CC_chemokine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 20
 FT CHAIN 21 89 SMALL INDUCIBLE CYTOKINE A18.
 FT DISULFID 30 54 BY SIMILARITY.
 FT DISULFID 31 70 BY SIMILARITY.
 SQ SEQUENCE 89 AA; 9849 MW; C287B94BC0518E4 CRC64;

 Query Match 34.8%; Score 133; DB 1; Length 89;
 Best Local Similarity 37.5%; Pred. No. 5.3e-10;
 Matches 24; Conservative 16; Mismatches 22; Indels 2; Gaps 1;

 Qy 4 GANNEDSVCCRDYRVYRLPLRVYKHFYVWTSDCSPRGVLLTFRDREICADRPVYLMKI 63
 Db 24 GTNKE--LCCLVYTSWQIPQKFIQVYDYSQPCPKPGVILLTKRGICADPNKKWQYK 81

 Qy 64 LNKL 67
 Db 82 ISDL 85

 RESULT 4
 SY03_RAT STANDARD; PRT; 92 AA.
 AC P50229;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
 DE protein 1-alpha) (MIP-1-alpha).
 GN SCYA3 OR MIPIA.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=CD-1; TISSUE=Lung;

RX MEDLINE-95298037; PubMed-7779098;
 RA Shi M.M., Godleski J.J., Paulauskis J.D.;
 RT "Molecular cloning and posttranscriptional regulation of macrophage
 RL inflammatory protein-1 alpha in alveolar macrophages.";
 RN Biochem. Biophys. Res. Commun. 211:289-295(1995).
 [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN-Long Evans; TISSUE=Lung;
 RX MEDLINE-95238980; PubMed-7722328;
 RA Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.;
 RT "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
 RT acute lung injury in rats.";
 RL J. Immunol. 154:4793-4802(1995).
 RN [3]
 RP SEQUENCE OF 24-57.
 RC STRAIN-Wistar;
 RX MEDLINE-96183056; PubMed-8607872;
 RA Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
 RT "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
 RT member of rat GRO/CINC, is a predominant chemokine produced by
 RT lipopolysaccharide-stimulated rat macrophages in culture.";
 RL Biochem. Biophys. Res. Commun. 220:945-948(1996).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
 CC HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
 CC BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA
 CC PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
 CC MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
 CC PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
 CC ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFUX. THIS PROTEIN
 CC BINDS HEPARIN.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; U22414; AAA80608.1; -;
 DR EMBL; U06435; AAA96498.1; -;
 DR HSSP; P13236; 1HUM.
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 34 57 BY SIMILARITY.
 FT DISULFID 35 73 BY SIMILARITY.
 FT CONFLICT 6 6 A -> T (IN REF. 2).
 FT CONFLICT 57 57 C -> W (IN REF. 2 AND 3).
 SQ SEQUENCE 92 AA; 10335 MW; 14E861C647F9A2EB CRC64;
 Query Match 33.8%; Score 129; DB 1; Length 92;
 Best Local Similarity 36.4%; Pred. No. 1.8e-09;
 Matches 24; Conservative .19; Mismatches 21; Indels 2; Gaps 2;
 QY 2 PYGMNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPYLK 61
 DB 25 PYGAD-TPTACCFSGR-QIPKFTADYFTSSLCSPGQVIFLTRKNRQICADPKETWVQ 82
 QY 62 MILNKL 67
 DB 83 EYITEL 88

RESULT 5
 SY04_CHICK
 ID SY04_CHICK STANDARD; PRT; 90 AA.
 AC Q90826; Q910C9;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 15-JUN-2002 (Rel. 41, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
 DE protein 1-beta homolog).
 GN SCY44.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Bone marrow;
 RX MEDLINE-95369710; PubMed-7642115;
 RA Petrenko O., Ischenko I., Enrietto P.J.;
 RT "Isolation of a cDNA encoding a novel chicken chemokine homologous to
 RT mammalian macrophage inflammatory protein-1 beta.";
 RL Gene 160:305-306(1995).
 RN [2]
 RP SEQUENCE FROM N.A.
 RA Hughes S.M., Bumstead N.;
 RT "Mapping of the gene encoding the chicken homologue of the mammalian
 RT chemokine SCY44";
 RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RP SEQUENCE OF 14-90 FROM N.A.
 RA Petrenko O., Enrietto P.J.;
 RL Submitted (JUL-1994) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
 CC (BY SIMILARITY).
 CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 DR EMBL; L34553; AAA48747.1; -;
 DR EMBL; AJ243034; CAB45103.1; -;
 DR HSSP; P13236; 1HUM.
 DR InterPro; IPR000827; CC_chemkine_sml.
 DR InterPro; IPR001811; Chemokine_IL8.
 DR Pfam; PF00048; IL8; 1.
 DR SMART; SM00199; SCY; 1.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Signal.
 FT SIGNAL 1 21 BY SIMILARITY.
 FT CHAIN 22 90 SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
 FT DISULFID 32 56 BY SIMILARITY.
 FT DISULFID 33 72 BY SIMILARITY.
 FT CONFLICT 87 87 M -> L (IN REF. 1).
 SQ SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
 Query Match 32.9%; Score 125.5; DB 1; Length 90;
 Best Local Similarity 34.8%; Pred. No. 4.7e-09;
 Matches 23; Conservative 16; Mismatches 26; Indels 1; Gaps 1;
 QY 2 PYGMNEDSVCCRDYVRYRLPLRVVVKHFYWTSDSCPRPGVLLTFRDKEICADRPVPYLK 61
 DB 23 PVGSDPPTS-CCFTYISRLQDFSFVADYYETNSQCPHAGVVFITRKGEVCANPNDWVQ 81
 QY 62 MILNKL 67


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Db 82 DYNMKN 87
:|:
RESULT 6
SY15_HUMAN STANDARD; PRT; 113 AA.
ID Q16663; Q0UM74;
AC 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A15 precursor (CCL15) (Macrophage
DE inflammatory protein 5) (MIP-5) (Chemokine CC-2) (HCC-2) (MIP-
DE 1 delta) (Leukotactin-1) (LKN-1) (Mrp-2b).
GN SCYA15 OR MIP5 OR NCC3.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
[1]
SEQUENCE FROM N.A., AND CHARACTERIZATION.
RC TISSUE=Liver;
RX MEDLINE-98263352; PubMed-9600961;
RA Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
RT "HCC-2, a human chemokine: gene structure, expression pattern, and
RT biological activity.";
RL Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
[2]
SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE-98287677; PubMed-9624581;
RA Wang W., Bacon K.B., Oldham E.R., Schall T.J.;
RT "Molecular cloning and functional characterization of human MIP-1
RT delta, a new C-C chemokine related to mouse CCR-18 and C10.";
RL J. Clin. Immunol. 18:214-222(1998).
[3]
SEQUENCE FROM N.A.
RX MEDLINE-99228475; PubMed-10213461;
RA Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
RT "Organization of the chemokine gene cluster on human chromosome
RT 17q11.2 containing the genes for CC chemokine MIP1-1, HCC-2, LEC, and
RT RANTES.";
RL J. Interferon Cytokine Res. 19:227-234(1999).
[4]
SEQUENCE FROM N.A.
RX MEDLINE-98208236; PubMed-9548457;
RA Young B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E.,
RA Murphy P.M., Locati M., Pease J.E., Kim K.K., Antol K., Kwon B.S.;
RT "Molecular cloning of leukotactin-1, a novel human beta-chemokine, a
RT chemoattractant for neutrophils, monocytes, and lymphocytes, and a
RT potent agonist at CC chemokine receptors 1 and 3.";
RL J. Immunol. 159:5201-5205(1997).
[5]
SEQUENCE FROM N.A.
RX MEDLINE-98208236; PubMed-9548457;
RA Young B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E.,
RA Murphy P.M., Locati M., Pease J.E., Kim K.K., Antol K., Kwon B.S.;
RT "Molecular cloning of leukotactin-1, a novel human beta-chemokine, a
RT chemoattractant for neutrophils, monocytes, and lymphocytes, and a
RT potent agonist at CC chemokine receptors 1 and 3.";
RL J. Immunol. 159:5201-5205(1997).
[6]
SEQUENCE OF 12-113 FROM N.A.
RX MEDLINE-97275308; PubMed-9129202;
RA Wells T.N.C., Peitsch M.C.;
RT "The chemokine information source: identification and
RT characterization of novel chemokines using the WorldWideWeb and
RT expressed sequence tag databases.";
RL J. Leukoc. Biol. 61:345-350(1997).
[8]
TISSUE SPECIFICITY.
RX MEDLINE-98226667; PubMed-9558365;
RA Young B.-S., Zhang S.M., Broxmeyer H.E., Cooper S., Antol K.,
RA Fraser M. Jr., Kwon B.S.;
RT "Characterization of Ckbeta8 and Ckbeta8-1: two alternatively spliced
RT forms of human beta-chemokine, chemoattractants for neutrophils,
RT monocytes, and lymphocytes, and potent agonists at CC chemokine
RT receptor 1.";
RL Blood 91:3118-3126(1998).
CC -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS T CELLS AND MONOCYTES,
CC BUT NOT NEUTROPHILS, EOSINOPHILS, OR B CELLS. ACTS MAINLY VIA CC
CC CHEMOKINE RECEPTOR CCR1. ALSO BINDS TO CCR3.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: MOST ABUNDANT IN HEART, SKELETAL MUSCLE AND
CC ADRENAL GLAND. LOWER LEVELS IN PLACENTA, LIVER, PANCREAS AND
CC BONE MARROW.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
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CC -----
DR EMBL: Z70293; CAA94308.1; -
DR EMBL: Z70292; CAA94306.1; -
DR EMBL: AF031587; AAB94617.1; -
DR EMBL: AF088219; AAC63328.1; -
DR EMBL: U58914; RAD10847.1; -
DR HSP: P55773; IG91.
DR Genew: HGNC:10613; SCYA15.
DR MIM: 601393; -
DR InterPro: IPR000827; CC_chemokine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
KW Cytokine; Chemotaxis; Heparin-binding; Signal; Polymorphism.
FT SIGNAL 1 21 SMALL INDUCIBLE CYTOKINE A15.
FT CHAIN 22 113
FT DISULFID 53 77
FT DISULFID 54 93
FT DISULFID 64 104
FT VARIANT 24 24 I -> T.
FT CONFLICT 14 14 /FTID=VAR_011640.
FT SEQUENCE 113 AA; 1224 MW; 0BA0FCE7B8A30A04 CRC64;
SQ
Query Match 31.7%; Score 121; DB 1; Length 113;
Best Local Similarity 33.9%; Pred. No. 2.2e-08;
Matches 19; Conservative 15; Mismatches 22; Indels 0; Gaps 0;
QY 12 CCRDYVRYRLPVRVVKHFWYVTSDCPRPGVLLTFRDKDKICADPRVPLKMLNKL 67
| | : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 53 CCSIYISQSPCSILMSKYFETSSECSKPGVIFLTKGRQVCAKPSGPGVQDCKMKL 108
RESULT 7
SY05_HUMAN STANDARD; PRT; 91 AA.
AC P13501; O43646; Q9NYA2;
DT 01-JAN-1990 (Rel. 13, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CC15) (T-cell specific RANTES
DE protein) (Sis-delta) (T cell-specific protein P228) (TCP228).
GN SCYA5
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
```


RA Gallegos C., Coit D., Merryweather J., Cerami A.;
 RT "Cloning and characterization of a cDNA for murine macrophage
 RT inflammatory protein (MIP), a novel monokine with inflammatory and
 RT chemokinetic properties";
 RL J. Exp. Med. 167:1939-1944(1988).
 RN [2]
 RP REVISIONS.
 RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermen K., Luedke C.,
 RA Gallegos C., Coit D., Merryweather J., Cerami A.;
 RL J. Exp. Med. 170:2189-2199(1989).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89093958; PubMed=2521353;
 RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
 RT "A family of small inducible proteins secreted by leukocytes are
 RT members of a new superfamily that includes leukocyte and
 RT fibroblast-derived inflammatory agents, growth factors, and
 RT indicators of various activation processes";
 RL J. Immunol. 142:679-687(1989).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=DBA/2J;
 RX MEDLINE=91016858; PubMed=2216738;
 RA Grove M., Lowe S., Graham G., Pragnell I., Plumb M.;
 RT "Sequence of the murine haemopoietic stem cell inhibitor/macrophage
 RT inflammatory protein 1 alpha gene";
 RL Nucleic Acids Res. 18:5561-5561(1990).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89184547; PubMed=2784565;
 RA Kwon B.S., Weissman S.M.;
 RT "cDNA sequences of two inducible T-cell genes";
 RL Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91237116; PubMed=2033269;
 RA Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
 RA Cerami A.;
 RT "Genomic structure of murine macrophage inflammatory protein-1 alpha
 RT and conservation of potential regulatory sequences with a human
 RT homologue, ID78";
 RL J. Immunol. 146:4031-4040(1991).
 RN [7]
 RP SEQUENCE FROM N.A.
 RC STRAIN=BALB/CJ, DBA/2J, NOD/LtJ, SJL/J, and B10.S/J; TISSUE=Spleen;
 RA Ma R.Z., Teuscher C.;
 RT Submitted (May-1998) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RP SEQUENCE OF 24-42.
 RX MEDLINE=88154745; PubMed=3279154;
 RA Wolpe S.D., Davatelis G., Sherry B., Beutler B., Hesse D.G.,
 RA Nguyen H.T., Moldaver L.L., Nathan C.F., Lowry S.F., Cerami A.;
 RT "Macrophages secrete a novel heparin-binding protein with
 RT inflammatory and neutrophil chemokinetic properties";
 RL J. Exp. Med. 167:570-581(1988).
 CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
 CC PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
 CC BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
 CC NEUTROPHILS.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
 CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC -----
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 CC -----
 CC EMBL; M23447; AAA40146.1; -

DR EMBL; X12531; CAA31047.1; -
 DR EMBL; X53372; CAA37452.1; -
 DR EMBL; J04491; AAA40304.1; -
 DR EMBL; M73061; AAA39707.1; -
 DR EMBL; AF065939; AAC17506.1; -
 DR EMBL; AF065940; AAC17507.1; -
 DR EMBL; AF065941; AAC17508.1; -
 DR EMBL; AF065942; AAC17509.1; -
 DR EMBL; AF065943; AAC17510.1; -
 DR PIR; A27596; A27596.
 DR PIR; A30552; A30552.
 DR PIR; A32393; A32393.
 DR PIR; S04533; S04533.
 DR PIR; S11685; S11685.
 DR HSP; P13236; IHUM.
 DR MGI; MGI:98260; Scya3.
 DR InterPro: IPR000827; CC_chemokine_sml.
 DR InterPro: IPR001811; Chemokine_IL8.
 DR Pfam: PF00048; IL8; 1.
 DR SMART: SM00199; SCV; 1.
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 KW Cytokine; Chemotaxis; Inflammatory response; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
 FT DISULFID 34 57 BY SIMILARITY.
 FT DISULFID 35 73 BY SIMILARITY.
 FT CONFLICT 22 22 F -> L (IN REF. 3).
 FT CONFLICT 62 62 V -> A (IN REF. 3).
 SQ SEQUENCE 92 AA; 10345 MW; 8BFF2DE7C6DEDD38 CRC64;
 Query Match 31.2%; Score 119; DB 1; Length 92;
 Best Local Similarity 34.8%; Pred. No. 3.2e-08;
 Matches 23; Conservative 18; Mismatches 23; Indels 2; Gaps 2;
 QY 2 PYGAMEDSVCCRDYVRYRLVLRVHFVWTSQPRPGVLLTFRDKETCADPRVYLK 61
 Db 25 PYGAD-TPTACCFYSR-KIPROFIVDYFETSSLCSPGVIFLTNRNRQICADSKETWVQ 82
 QY 62 MILNKL 67
 Db 83 EYITDL 88
 RESULT 9
 SY12_MOUSE
 ID SY12_MOUSE STANDARD; PRT; 104 AA.
 AC Q52401; Q9QYD6;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Small inducible cytokine A12 precursor (CCL12) (Monocyte chemotactic
 DE protein 5) (MCP-5) (MCP-1 related chemokine).
 GN SCYA12 OR MCP5.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Theria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97079149; PubMed=8920881;
 RA Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C.,
 RA Wershil B.K., Gutierrez-Ramos J.C.;
 RT "Distinct expression and function of the novel mouse chemokine
 RT monocyte chemotactic protein-5 in lung allergic inflammation";
 RL J. Exp. Med. 184:1939-1951(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97149438; PubMed=8996246;
 RA Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.;
 RT "Murine monocyte chemoattractant protein (MCP)-5: a novel CC
 RT chemokine that is a structural and functional homologue of human
 RT MCP-1";
 RL J. Exp. Med. 185:99-109(1997).

GN OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN SEQUENCE FROM N.A.
RP MEDLINE=92277990; PubMed=1375672;
RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
RA Krensky A.M., Neilson E.G.;
RT "Isolation and characterization of cDNA from renal tubular epithelium
RL encoding murine Rantes.";
RN Kidney Int. 41:220-225(1992).
RN [2]
RN SEQUENCE FROM N.A.
RP MEDLINE=92289805; PubMed=1376260;
RA Schall T.J., Simpson N.J., Mak J.Y.;
RT "Molecular cloning and expression of the murine RANTES cytokine:
RL structural and functional conservation between mouse and man.";
RN Eur. J. Immunol. 22:1477-1481(1992).
RN [3]
RN SEQUENCE FROM N.A.
RP STRAIN=NIH Swiss;
RC MEDLINE=94133613; PubMed=7507961;
RA Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
RT "Cloning, genomic organization, and chromosomal localization of the
RL Scya5 gene encoding the murine chemokine RANTES.";
RN J. Immunol. 152:1182-1189(1994).
RN [4]
RN SEQUENCE FROM N.A.
RP STRAIN=BALB/C;
RC MEDLINE=94217689; PubMed=7513046;
RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
RA Paznekas W.A.;
RT "Definition of a lipopolysaccharide-responsive element in the 5'-
RL flanking regions of Murantes and crg-2.";
RN Mol. Cell. Biol. 14:2914-2925(1994).
RN [5]
RN SEQUENCE FROM N.A.
RP STRAIN=BALB/CJ, B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
RA Ma R.Z., Teuscher C.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
CC EMBL: M77747; AAA00029.1; -
CC EMBL: S37648; AAB22330.1; -
CC EMBL: U02298; AAA18302.1; -
CC EMBL: X70675; CAA50011.1; -
CC EMBL: AF065944; AAC17511.1; -
CC EMBL: AF065945; AAC17512.1; -
CC EMBL: AF065946; AAC17513.1; -
CC EMBL: AF065947; AAC17514.1; -
CC HSSP: P13501; IRTN.
CC MGD: MGI:98262; Scya5.
CC InterPro: IPR000827; CC_chemkine_sml.
CC InterPro: IPR001811; Chemokine_IL8.
CC Pfam: PF00048; IL8; 1.
CC SMART: SM00199; SCY; 1.
CC PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
CC -----

GN OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN SEQUENCE FROM N.A.
RP MEDLINE=92277990; PubMed=1375672;
RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
RA Krensky A.M., Neilson E.G.;
RT "Isolation and characterization of cDNA from renal tubular epithelium
RL encoding murine Rantes.";
RN Kidney Int. 41:220-225(1992).
RN [2]
RN SEQUENCE FROM N.A.
RP MEDLINE=92289805; PubMed=1376260;
RA Schall T.J., Simpson N.J., Mak J.Y.;
RT "Molecular cloning and expression of the murine RANTES cytokine:
RL structural and functional conservation between mouse and man.";
RN Eur. J. Immunol. 22:1477-1481(1992).
RN [3]
RN SEQUENCE FROM N.A.
RP STRAIN=NIH Swiss;
RC MEDLINE=94133613; PubMed=7507961;
RA Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
RT "Cloning, genomic organization, and chromosomal localization of the
RL Scya5 gene encoding the murine chemokine RANTES.";
RN J. Immunol. 152:1182-1189(1994).
RN [4]
RN SEQUENCE FROM N.A.
RP STRAIN=BALB/C;
RC MEDLINE=94217689; PubMed=7513046;
RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
RA Paznekas W.A.;
RT "Definition of a lipopolysaccharide-responsive element in the 5'-
RL flanking regions of Murantes and crg-2.";
RN Mol. Cell. Biol. 14:2914-2925(1994).
RN [5]
RN SEQUENCE FROM N.A.
RP STRAIN=BALB/CJ, B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
RA Ma R.Z., Teuscher C.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
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CC -----
CC EMBL: U50712; AAB50053.1; -
CC EMBL: U66670; AAB49424.1; -
CC EMBL: AF065934; AAF15384.1; -
CC EMBL: AF065935; AAF15385.1; -
CC EMBL: AF065936; AAF15386.1; -
CC EMBL: AF065937; AAF15387.1; -
CC EMBL: AF065938; AAF15388.1; -
CC HSSP: P13500; IDOL.
CC MGD: MGI:108224; Scya12.
CC InterPro: IPR000827; CC_chemkine_sml.
CC InterPro: IPR001811; Chemokine_IL8.
CC Pfam: PF00048; IL8; 1.
CC SMART: SM00199; SCY; 1.
CC PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
CC Cytokine; Chemotaxis; signal; inflammatory response.
CC SIGNAL 1 22 BY SIMILARITY.
CC CHAIN 23 104 SMALL INDUCIBLE CYTOKINE A12.
CC DISULFID 33 58 BY SIMILARITY.
CC DISULFID 34 74 BY SIMILARITY.
CC VARIANT 94 104 OTFILEPSCLG -> RT (IN STRAIN SJL/J).
CC SEQUENCE 104 AA; 11659 MW; 8D102F4FF4CC3DBF CRC64;
Query Match 30.8%; Score 117.5; DB 1; Length 104;
Best Local Similarity 39.0%; Pred. No. 5.6e-08;
Matches 23; Conservative 13; Mismatches 22; Indels 1; Gaps 1;
QY 12 CCDDYVRYRLPLRVKHP-YWTSDCPRPGVLLTFRDKCAIDPRVPLKMLKLSQ 69
DB 33 CCYNNVOKIHKVRLKSYRTSSQCPREAVIFRTILDICADPKCKWKVKNINHLDK 91
RESULT 10
SY05_MOUSE
ID SY05_MOUSE STANDARD; PRT; 91 AA.
AC P30882;
DT 01-JUL-1993 (Rel. 26, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta) (Murantes).

GN OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN SEQUENCE FROM N.A.
RP MEDLINE=92277990; PubMed=1375672;
RA Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
RA Krensky A.M., Neilson E.G.;
RT "Isolation and characterization of cDNA from renal tubular epithelium
RL encoding murine Rantes.";
RN Kidney Int. 41:220-225(1992).
RN [2]
RN SEQUENCE FROM N.A.
RP MEDLINE=92289805; PubMed=1376260;
RA Schall T.J., Simpson N.J., Mak J.Y.;
RT "Molecular cloning and expression of the murine RANTES cytokine:
RL structural and functional conservation between mouse and man.";
RN Eur. J. Immunol. 22:1477-1481(1992).
RN [3]
RN SEQUENCE FROM N.A.
RP STRAIN=NIH Swiss;
RC MEDLINE=94133613; PubMed=7507961;
RA Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
RT "Cloning, genomic organization, and chromosomal localization of the
RL Scya5 gene encoding the murine chemokine RANTES.";
RN J. Immunol. 152:1182-1189(1994).
RN [4]
RN SEQUENCE FROM N.A.
RP STRAIN=BALB/C;
RC MEDLINE=94217689; PubMed=7513046;
RA Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
RA Paznekas W.A.;
RT "Definition of a lipopolysaccharide-responsive element in the 5'-
RL flanking regions of Murantes and crg-2.";
RN Mol. Cell. Biol. 14:2914-2925(1994).
RN [5]
RN SEQUENCE FROM N.A.
RP STRAIN=BALB/CJ, B10.S/J, NOD/LtJ, and SJL/J; TISSUE=Spleen;
RA Ma R.Z., Teuscher C.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
CC EMBL: M77747; AAA00029.1; -
CC EMBL: S37648; AAB22330.1; -
CC EMBL: U02298; AAA18302.1; -
CC EMBL: X70675; CAA50011.1; -
CC EMBL: AF065944; AAC17511.1; -
CC EMBL: AF065945; AAC17512.1; -
CC EMBL: AF065946; AAC17513.1; -
CC EMBL: AF065947; AAC17514.1; -
CC HSSP: P13501; IRTN.
CC MGD: MGI:98262; Scya5.
CC InterPro: IPR000827; CC_chemkine_sml.
CC InterPro: IPR001811; Chemokine_IL8.
CC Pfam: PF00048; IL8; 1.
CC SMART: SM00199; SCY; 1.
CC PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
CC -----

10

SQ SEQUENCE 94 AA; 10507 MW; 7959C56BA8FDAF08 CRC64;
Query Match 29.7%; Score 113.5; DB 1; Length 94;
Best Local Similarity 35.6%; Pred. No. 1.6e-07;
Matches 21; Conservative 13; Mismatches 18; Indels 7; Gaps 1;
QY 12 CCRDYYRRLPLRVVVKHFWYTSDCPRFGVVLLTFRDKKICADPR-----VPYLKMI 63
Db 33 CCLEYFKGAIPRLKLTWYQTSDCSRDAIVFTVQGRAICSDPNPKRVKNVAVYQSL 91

Search completed: July 28, 2003, 04:01:12
Job time : 3.62395 secs

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Db      74 KKILHKL 81

RESULT 2
Q91ZH5
ID Q91ZH5 PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TREMELrel. 19, Created)
DT 01-DEC-2001 (TREMELrel. 19, Last sequence update)
DT 01-NAR-2002 (TREMELrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis.";
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1; -
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

Query Match 67.0%; Score 259; DB 11; Length 92;
Best Local Similarity 63.2%; Pred. No. 1.3e-26;
Matches 43; Conservative 16; Mismatches 9; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRVYRRLPLRVVKKHYWTSDSCPRGVVLLTFRDKEICADPRVYL 60
Db 25 GPGANVEDSICCDYIRHPLPRFVKFEYWTSCRKPGVVLITVKNRDICADPRQVWV 84
QY 61 KMILNKL 68
Db 85 KKILHKL 92

RESULT 3
Q9QZU2
ID Q9QZU2 PRELIMINARY; PRT; 92 AA.
AC Q9QZU2;
DT 01-MAY-2000 (TREMELrel. 13, Created)
DT 01-MAY-2000 (TREMELrel. 13, Last sequence update)
DT 01-JUN-2002 (TREMELrel. 21, Last annotation update)
DE Macrophage-derived chemokine.
GN SCYA22.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes.";
RL Blood 0:0-0(1999).
DR EMBL; AF163476; RAD55763.1; -
DR HSSP; Q98157; ICM9.
DR MGD; MGI:1306779; Scya22.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
SQ SEQUENCE 92 AA; 10331 MW; 17FE31A87F352B63 CRC64;

Query Match 67.0%; Score 256; DB 11; Length 92;
Best Local Similarity 61.8%; Pred. No. 3.2e-26;
Matches 42; Conservative 17; Mismatches 9; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRVYRRLPLRVVKKHYWTSDSCPRGVVLLTFRDKEICADPRVYL 60
Db 25 GPGANVEDSICCDYIRHPLPRFVKFEYWTSCRKPGVVLITVKNRDICADPRQVWV 84
QY 61 KMILNKL 68
Db 85 KKILHKL 92

RESULT 4
Q98158
ID Q98158 PRELIMINARY; PRT; 95 AA.
AC Q98158; 012569;
DT 01-FEB-1997 (TREMELrel. 02, Created)
DT 01-JUL-1997 (TREMELrel. 04, Last sequence update)
DT 01-JUN-2001 (TREMELrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.";
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RT "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
RT (HHV8).";
RL Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
RN [3]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo D.,
RA Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=97296220; PubMed=9151804;
RA Neipel F., Albrecht J.C., Fleckenstein B.;
RT "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
RT human herpesvirus 8: determinants of its pathogenicity?";
RL J. Virol. 71:4187-4192(1997).
RN [7]
RP SEQUENCE FROM N.A.
RA Sun R., Lin S.-F., Miller G.;
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A.
RA Ren S., Lin S.-F., Miller G.;
RL Submitted (FEB-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; U75698; AAC57095.1; -
DR EMBL; U74585; AAB61704.1; -
DR EMBL; U93872; AAB62671.1; -

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DR EMBL; U71366; AAC34943.1; -;
DR EMBL; U50138; AAD11536.1; -;
DR HSP; Q98157; IVP.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Hypothetical protein.
SQ SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;

Query Match 36.9%; Score 141; DB 12; Length 95;
Best Local Similarity 39.3%; Pred. No. 5.5e-11;
Matches 22; Conservative 19; Mismatches 15; Indels 0; Gaps 0;

QY 12 CCRDYVRLVRLVVKHYFTWSDSCPRPGVLLTFRDKEICADPRVYLKMLNKL 67
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 36 CCYGFQHPVPVQILKENYFTSPACPKPGVILLTKRGQICADPSKNVRLMQEL 91

RESULT 5

Q8QG57
ID Q8QG57 PRELIMINARY; PRT; 91 AA.
AC Q8QG57
DT 01-JUN-2002 (TRENBLrel. 21, Created)
DT 01-JUN-2002 (TRENBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TRENBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID-9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-21655115; PubMed-11797102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
chicken CC chemokines."
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -;
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match 34.3%; Score 131; DB 13; Length 91;
Best Local Similarity 36.4%; Pred. No. 1.1e-09;
Matches 24; Conservative 18; Mismatches 22; Indels 2; Gaps 1;

QY 2 PYGNMEDSVCCRDYVRLVRLVVKHYFTWSDSCPRPGVLLTFRDKEICADPRVYLK 61
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 25 PFGA--DTVCCFNYSVRKLPQNHVKDYFTSSKCPQAAVVFITRKGRQVCANPDARWK 82

QY 62 MILNKL 67

Db 83 EYINFL 88

RESULT 6

Q91ZLO
ID Q91ZLO PRELIMINARY; PRT; 92 AA.
AC Q91ZLO
DT 01-DEC-2001 (TRENBLrel. 19, Created)
DT 01-DEC-2001 (TRENBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TRENBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1 beta.
GN MIP-1BETA.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID-42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C., Pletneva L.M., Prince G.A.;
RT "Sigmodon hispidus cytokines, chemokines and interferons."
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF421392; AAL16933.1; -;
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;

Query Match 34.2%; Score 130.5; DB 11; Length 92;
Best Local Similarity 40.9%; Pred. No. 1.3e-09;
Matches 27; Conservative 10; Mismatches 28; Indels 1; Gaps 1;

QY 2 PYGNMEDSVCCRDYVRLVRLVVKHYFTWSDSCPRPGVLLTFRDKEICADPRVYLK 61
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 25 PRGSDPPTS-CCFSYASRKLPRNFVTDYETSSLSKPAVVFITRKREVCADPSQPVWN 83

QY 62 MILNKL 67

Db 84 EYVNDL 89

RESULT 7

Q918E0
ID Q918E0 PRELIMINARY; PRT; 89 AA.
AC Q918E0
DT 01-OCT-2000 (TRENBLrel. 15, Created)
DT 01-OCT-2000 (TRENBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TRENBLrel. 19, Last annotation update)
DE Chemokine K203 precursor.
GN K203.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID-9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-20170941; PubMed-10704244;
RA Sick C., Schneider K., Staeheli P., Weining K.C.;
RT "Novel chicken CXCL and CC chemokines."
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -;
DR HSP; P13236; IHUM.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Signal.
FT SIGNAL 1 21 POTENTIAL.
FT CHAIN 22 89 CHEMOKINE K203.
SQ SEQUENCE 89 AA; 9896 MW; 6FA2EA7A4950CA75 CRC64;

Query Match 34.0%; Score 130; DB 13; Length 89;
Best Local Similarity 27.9%; Pred. No. 1.5e-09;
Matches 19; Conservative 23; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGNMEDSVCCRDYVRLVRLVVKHYFTWSDSCPRPGVLLTFRDKEICADPRVYLK 61
||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : :
Db 23 PVGPDV--PTCTTYITHKIPRNLIQRHYSTSCSKPAITFITKREVCANPSDPVQV 80

QY 62 MILNKL 69

Db 81 RYLQSVKR 88

RESULT 8

Q91Z65
ID Q91Z65 PRELIMINARY; PRT; 92 AA.
AC Q91Z65
DT 01-DEC-2001 (TRENBLrel. 19, Created)
DT 01-DEC-2001 (TRENBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TRENBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
GN MIP1 ALPHA.
OS Sigmodon hispidus (Hispid cotton rat).


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Q8SQ40
ID Q8SQ40 PRELIMINARY; PRT; 92 AA.
AC Q8SQ40;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE RANTES protein.
GN RANTES.
OS Felis silvestris catus (Cat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
OX NCBI_TaxID=9685;
RN [1]
RP SEQUENCE FROM N.A.
RA Kimura T., Kano R., Hasegawa A.;
RL "molecular cloning of feline RANTES gene.";
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB083479; BAB8940.1; -
SQ SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;

Query Match 29.8%; Score 114; DB 6; Length 92;
Best Local Similarity 31.7%; Pred. No. 2e-07;
Matches 19; Conservative 19; Mismatches 20; Indels 2; Gaps 1;

QY 2 PYGMNEDSVCCRDYVRLPLRVVKHFYWTSDSCPRPGVLLTFDKKEICADPRVPYLYK 61
Db 25 PYAS--DTTPCCFAVLSHPLPLTHLQYFYFTSSKCSMPAVFVTRKRQVCANPQKKWYR 82

RESULT 13
ID Q9WUZ6 PRELIMINARY; PRT; 93 AA.
AC Q9WUZ6;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Thymus and activation-regulated chemokine precursor (Small inducible
cytokine subfamily A17).
GN TARC OR ABCD-2 OR SCYA17.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Lieberam I., Forster I.;
RL "The murine b-chemokine TARC is expressed by subsets of dendritic
cells and attracts primed CD4+ T cells.";
RL Submitted (MAY-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=LIVER;
RX MEDLINE=99438049; PubMed=10508268;
RA Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F.,
Rolink A.G.;
RL "Three chemokines with potential functions in T lymphocyte-independent
and -dependent B lymphocyte stimulation.";
RL Eur. J. Immunol. 29:2934-2947(1999).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=PANCREAS;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
Alizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
Kuehl P., Lewis S., Matsuo Y., Nikaido I., Resole G., Quackenbush J.,
Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
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RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
Nardone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
RN [4]
RP SEQUENCE FROM N.A.
RC TISSUE=THYMUS GLAND;
RA Strausberg R.;
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ242587; CAB45256.1; -
DR EMBL; AF125572; AAD56602.1; -
DR EMBL; AF125571; AAD56601.1; -
DR EMBL; AK007663; BAB25171.1; -
DR EMBL; BC028505; AAH28505.1; -
DR HSSP; Q98157; 1CM9.
DR MGD; MGI:1329039; Scyal7.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Signal.
FT SIGNAL 1 20
FT CHAIN 21 93
FT THYMUS AND ACTIVATION-REGULATED
FT CHEMOKINE.
SQ SEQUENCE 93 AA; 10466 MW; 6EFCDFDEBEECCCE CRC64;

Query Match 29.8%; Score 114; DB 11; Length 93;
Best Local Similarity 42.0%; Pred. No. 2e-07;
Matches 21; Conservative 10; Mismatches 19; Indels 0; Gaps 0;

QY 12 CCRLDYVRLPLRVVKHFYWTSDSCPRPGVLLTFDKKEICADPRVPYLYK 61
Db 33 CCLDFKGAIPKIRKLVSWKTSVECSRDAIVFLTVGKLCICADPKDKHKV 82

RESULT 14
ID Q9R043 PRELIMINARY; PRT; 131 AA.
AC Q9R043;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE CC chemokine ABCD-2.
GN SCYA17 OR ABCD-2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=LIVER;
RX MEDLINE=99438049; PubMed=10508268;
RA Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F.,
Rolink A.G.;
RL "Three chemokines with potential functions in T lymphocyte-independent
and -dependent B lymphocyte stimulation.";
RL Eur. J. Immunol. 29:2934-2947(1999).
DR EMBL; AF125570; AAD56600.1; -
DR HSSP; Q98157; 1CM9.
DR MGD; MGI:1329039; Scyal7.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ SEQUENCE 131 AA; 15016 MW; 9515123376912A7E CRC64;
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:28 ; Search time 15.0756 Seconds
(without alignments)
609.878 Million cell updates/sec

Title: US-09-509-165A-32

Perfect score: 379

Sequence: 1 GPGANNEDSVCCRDYVR.....EICADPRVFWKMLNKLQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapert 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	379	100.0	69	AAW20062	Human macrophage d
2	379	100.0	69	AAW20062	Macrophage derived
3	379	100.0	69	AAW20062	Human macrophage-d
4	362	95.5	69	AAW20062	Human chemokine MD
5	362	95.5	69	AAW20062	Human MDC protein.
6	362	95.5	70	AAW20060	Human macrophage d
7	362	95.5	70	AAW20060	Macrophage derived
8	362	95.5	70	AAW20060	Human macrophage-d
9	362	95.5	86	AAW59432	Human chemokine pr
10	362	95.5	93	AAW20058	Macrophage derived

11	362	95.5	93	AAW62783	Amino acid sequenc
12	362	95.5	93	AAW59433	Human chemokine pr
13	362	95.5	93	AAW40811	Macrophage-derived
14	362	95.5	93	AAW26175	Macrophage-derived
15	362	95.5	93	AAW24414	Human macrophage d
16	362	95.5	93	AAW05871	Human macrophage-d
17	362	95.5	93	AAW06829	Macrophage derived
18	362	95.5	93	AAW07500	A human monokine d
19	362	95.5	93	AAW07500	Human macrophage-d
20	362	95.5	93	AAW05878	Yeast pre-pro-alpha
21	362	95.5	172	AAW29895	Human MDC and huma
22	362	95.5	334	AAW29904	Human MDC and HIV-
23	362	95.5	587	AAW29900	Cytokine beta-13 s
24	357	94.2	93	AAW07604	Human chemokine be
25	357	94.2	93	AAW57881	Amino acid sequenc
26	357	94.2	93	AAW68352	Stem cell mobilisi
27	356	93.9	68	AAW17668	Human macrophage-d
28	353	93.1	93	AAW05879	Macaque macrophage
29	352	92.9	93	AAW05880	Human macrophage d
30	350	92.3	69	AAW20061	Macrophage derived
31	350	92.3	69	AAW24415	Human macrophage-d
32	350	92.3	69	AAW05874	Human macrophage d
33	322	85.0	93	AAW20059	Macrophage derived
34	322	85.0	93	AAW24417	Human macrophage-d
35	322	85.0	93	AAW05872	Human macrophage-d
36	266	70.2	473	AAW61797	Chimeric chemokine
37	264	69.7	68	AAW61808	Murine MDC mature
38	264	69.7	68	AAW78392	Mouse chemokine m
39	264	69.7	68	AAW68355	Murine chemokine m
40	264	69.7	92	AAW59434	Mouse chemokine pr
41	264	69.7	92	AAW05876	Mouse macrophage-d
42	254	67.0	81	AAW05877	Rat macrophage-der
43	210.5	55.5	67	AAW78396	Human/mouse hybrid
44	210.5	55.5	67	AAW68359	Chimeric chemokine
45	189	49.9	37	ABB39053	Peptide #6359 enco

ALIGNMENTS

RESULT 1
AAW20062
ID AAW20062 standard; Protein; 69 AA.
XX
AC AAW20062;
XX
DT 11-SEP-1997 (first entry)
XX
DE Human macrophage derived chemokine analogue.
XX
DE MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.
XX
OS Synthetic.
XX
PN WO9640923-A1.
XX
PD 19-DEC-1996.
XX
PF 07-JUN-1996; 96WO-US10114.
XX
PR 16-NOV-1995; 95US-0558658.
PR 07-JUN-1995; 95US-0479620.
XX
(ICOS-) ICOS CORP.
PI Godiska R, Gray PW;
XX
DR WPI; 1997-052324/05.
XX
PT Macrophage derived chemokine (MDC) and analogues - used in the
treatment of inflammatory diseases, MDC antibodies used to treat

PT Crohn's disease, rheumatoid arthritis, etc.
 PS Claim 25; Page 84; 106pp; English.
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX Sequence 69 AA;
 SQ Query Match 100.0%; Score 379; DB 18; Length 69;
 Best Local Similarity 100.0%; Pred. No. 6.4e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
 DB 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
 QY 61 KMLNKLQSQ 69
 DB 61 KMLNKLQSQ 69
 RESULT 2
 AAY24416
 ID AAY24416 standard; peptide; 69 AA.
 XX AC AAY24416;
 XX DT 24-SEP-1999 (first entry)
 DE Macrophage derived chemokine analogue MDC-eyfy.
 XX KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
 KW inflammation; immune response; inflammatory disorder; Crohn's disease;
 KW atherosclerosis; arthritis; pulmonary fibrosis.
 XX OS Homo sapiens.
 OS Synthetic.
 XX PN US5932703-A.
 XX PD 03-AUG-1999.
 XX PF 07-JUN-1996; 96US-0660542.
 XX PR 07-JUN-1996; 96US-0660542.
 XX PR 07-JUN-1995; 95US-0479620.
 XX PR 16-NOV-1995; 95US-0558658.
 XX PA (ICOS-) ICOS CORP.
 XX PI Godiska R, Gray PW;
 XX WPI; 1999-443621/37.
 DR Macrophage derived chemokine analogues useful for inhibiting
 PT macrophage derived chemokine-induced chemotaxis
 XX Example 11; Column 61; 43pp; English.
 XX The present sequence represents a macrophage derived chemokine (MDC)
 CC analogue. MDC analogues are capable of inhibiting MDC induced
 CC chemotaxis. Therefore, the MDC analogues may be used to modulate

CC inflammatory and immune responses allowing for the treatment of
 CC disorders associated with excessive inflammation or overactive immune
 CC responses. Inflammatory disorders which may be treated in this way
 CC include Crohn's disease (manifested by chronic inflammation of the
 CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.
 XX Sequence 69 AA;
 SQ Query Match 100.0%; Score 379; DB 20; Length 69;
 Best Local Similarity 100.0%; Pred. No. 6.4e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
 DB 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
 QY 61 KMLNKLQSQ 69
 DB 61 KMLNKLQSQ 69
 RESULT 3
 AAY05875
 ID AAY05875 standard; Protein; 69 AA.
 XX AC AAY05875;
 XX DT 02-AUG-1999 (first entry)
 DE Human macrophage-derived C-C chemokine MDC analogue MDC-eyfy.
 XX KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
 KW antagonist; chemoattractant; antiproliferative; dermatological;
 KW immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant;
 KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
 KW vaccine; RANTES.
 XX OS Homo sapiens.
 OS Synthetic.
 XX PN WO9915666-A2.
 XX FT Key Location/Qualifiers
 FT Misc-difference 28..31 /note="His-Phe-Tyr-Trp in native MDC"
 XX PD 01-APR-1999.
 XX PF 28-SEP-1998; 98WO-US20270.
 XX PR 28-APR-1998; 98US-0067447.
 XX PR 26-SEP-1997; 97US-0939107.
 XX PA (ICOS-) ICOS CORP.
 XX PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 XX WPI; 1999-254715/21.
 XX PT Vertebrate Macrophage Derived Chemokines, analogues and antagonists
 PS Example 11; Page 13; 147pp; English.
 XX The present sequence represents synthetic analogue MDC-eyfy of the
 CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).
 CC MDC-eyfy consists of amino acid residues 1-69 of the MDC mature
 CC polypeptide, with residues 28-31 (His-Phe-Tyr-Trp) replaced with the
 CC sequence Glu-Tyr-Phe-Tyr, derived from the amino acid sequence of
 CC the chemokine RANTES. The analogue is expected to be an antagonist
 CC of MDC, inhibiting activity by competitively binding to the
 CC receptor that recognises MDC or by forming inactive heterodimers
 CC with MDC. Alternatively, MDC-eyfy may confer some of the activities
 CC RANTES, such as chemotaxis of T lymphocytes, monocytes or

CC eosinophils. MDC antagonists are used in claimed methods for the
 CC preparation of medicaments for the suppression of the proliferation
 CC of a mammalian immunodeficiency virus, for inhibiting platelet
 CC aggregation in a mammal, for the treatment or palliation of lupus
 CC erythematosus in a mammal, for inhibiting MDC-induced activation,
 CC chemotaxis or proliferation of cells that express CCR4, for
 CC inhibiting or palliating an allergic reaction in a mammal, and for
 CC treating asthma.
 XX Sequence 69 AA;
 SQ

Query Match 100.0%; Score 379; DB 20; Length 69;
 Best Local Similarity 100.0%; Pred. No. 6.4e-42;
 Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 DB 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 QY 61 KMILNKLSQ 69
 DB 61 KMILNKLSQ 69

RESULT 4
 AAO20022
 ID AAO20022 standard; protein; 69 AA.
 XX AAO20022;
 AC AAO20022;
 XX 11-JUN-2002 (first entry)
 DT Human chemokine MDC protein.
 DE
 XX Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic;
 KW antiarteriosclerotic; dermatological; antinflammatory; antiallergic;
 KW immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV;
 KW AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis;
 KW atheroma; atherosclerosis; organ transplant rejection; MDC.
 XX Homo sapiens.
 OS
 XX WO200204015-A1.
 PN 17-JAN-2002.
 XX 12-JUL-2001; 2001WO-US21933.
 XX 12-JUL-2000; 2000US-217683P.
 PR (GRYP-) GRYPHON SCI.
 XX Kochendoerfer G, Botti P, Bradburne JA, Chen S, Cressman S;
 PA WPI; 2002-268857/31.
 XX New polymer-modified bioactive synthetic chemokines useful in the
 DR treatment of various diseases or disorders e.g. asthma
 PT Disclosure; Fig 10C; 176pp; English.
 PS
 XX The invention relates to polymer-modified bioactive synthetic chemokines
 CC and to methods for their production and use. The compounds and methods of
 CC the backbone of the invention are useful in the analysis and treatment of
 CC various diseases states e.g. HIV and AIDS related disorders, asthma,
 CC allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ
 CC transplant rejection, and rheumatoid arthritis. This sequence represents
 CC the human chemokine MDC protein of the invention.
 XX
 SQ Sequence 69 AA;
 Query Match 95.5%; Score 362; DB 23; Length 69;
 Best Local Similarity 94.2%; Pred. No. 1.1e-39;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 DB 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 QY 61 KMILNKLSQ 69
 DB 61 KMILNKLSQ 69

RESULT 5
 AAO14155
 ID AAO14155 standard; protein; 69 AA.
 XX AAO14155;
 AC AAO14155;
 XX 25-APR-2002 (first entry)
 DT Human MDC protein.
 DE
 XX Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
 KW asthma; allergic rhinitis; atopic dermatitis; atheroma; antinflammatory;
 KW antiasthmatic; antiallergic; dermatological; antiarteriosclerotic;
 KW antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;
 KW atherosclerosis; organ transplant rejection; rheumatoid arthritis.
 XX Homo sapiens.
 OS
 XX WO200204499-A1.
 PN 17-JAN-2002.
 XX 12-JUL-2001; 2001WO-US21934.
 XX 12-JUL-2000; 2000US-217683P.
 PR (GRYP-) GRYPHON SCI.
 XX Offord R, Gaertner H, Hartley O;
 PI WPI; 2002-171703/22.
 XX Chemokine receptor modulator useful for treating e.g. asthma, allergic
 DR rhinitis comprises a chemically modified carboxyl-terminus and/or amino
 PT terminus analogs
 XX Example 3; Fig 2; 86pp; English.
 PS
 XX The present invention relates to chemokine receptor modulators, which
 CC comprise a chemokine polypeptide chain modified at N-terminus with an
 CC aliphatic chain and at least one amino acid derivatives and/or modified
 CC at its C-terminus with an aliphatic chain or polycyclic. The modulators
 CC can be used to treat diseases such as HIV infection, AIDS, asthma,
 CC allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ
 CC transplant rejection and rheumatoid arthritis. The present sequence is
 CC the human MDC protein.
 XX
 SQ Sequence 69 AA;
 Query Match 95.5%; Score 362; DB 23; Length 69;
 Best Local Similarity 94.2%; Pred. No. 1.1e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 DB 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTSDCPRPGVLLTFRDKEICADPRVPWV 60
 QY 61 KMILNKLSQ 69
 DB 61 KMILNKLSQ 69

RESULT 6

AAW20060
ID AAW20060 standard; Protein; 70 AA.

XX
AC AAW20060;

XX
DT 11-SEP-1997 (first entry)

XX
DE Human macrophage derived chemokine analogue.

XX
KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW wound healing; angiogenesis; inflammation.

XX
OS Synthetic.

XX
PN WO9640923-A1.

XX
PD 19-DEC-1996.

XX
PF 07-JUN-1996; 96WO-US10114.

XX
PR 16-NOV-1995; 95US-0558658.

XX
PR 07-JUN-1995; 95US-0479620.

XX
PA (ICOS-) ICOS CORP.

XX
PI Godiska R, Gray PW;

XX
WPI; 1997-052324/05.

XX
PT Macrophage derived chemokine (MDC) and analogues - used in the
PT treatment of inflammatory diseases, MDC antibodies used to treat
PT Crohn's disease, rheumatoid arthritis, etc.

XX
PS Claim 25; Page 83; 106pp; English.

XX
CC A new macrophage derived chemokine, MDC, a member of the C-C
CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's
CC analogues may be used in the treatment of inflammatory diseases
CC especially diseases characterised by monocyte chemotaxis towards a
CC site of inflammation. MDC and it's analogues also induce fibroblast
CC proliferation having a positive effect in wound healing and
CC angiogenesis. They may prove to be clinically important in the
CC treatment of tumours, by directly or indirectly inhibiting tumour
CC formation. Antibodies directed against MDC and its analogues may be
CC used in the treatment of Crohn's disease, rheumatoid arthritis and
CC atherosclerosis. Probes and/or primers for the identification of MDC
CC encoding sequences can be derived from MDC encoding sequences.

XX
SQ Sequence 70 AA;

Query Match 95.5%; Score 362; DB 18; Length 70;

Best Local Similarity 94.2%; Pred. No. 1.1e-39;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1.GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKEICADPRVPWV 60

DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKEICADPRVPWV 61

QY 61 KMILNKLSQ 69

DB 62 KMILNKLSQ 70

RESULT 7

AAI24413

ID AAI24413 standard; peptide; 70 AA.

XX
AC AAI24413;

XX
DT 24-SEP-1999 (first entry)

XX

DE

XX Macrophage derived chemokine analogue MDC (n+1).

XX
KW Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
KW inflammation; immune response; inflammatory disorder; Crohn's disease;
KW atherosclerosis; arthritis; pulmonary fibrosis.

XX
OS Homo sapiens.

XX
OS Synthetic.

XX
PN US5932703-A.

XX
PD 03-AUG-1999.

XX
PF 07-JUN-1996; 96US-0660542.

XX
PR 07-JUN-1996; 96US-0660542.

XX
PR 07-JUN-1995; 95US-0479620.

XX
PR 16-NOV-1995; 95US-0558658.

XX
PA (ICOS-) ICOS CORP.

XX
PI Godiska R, Gray PW;

XX
WPI; 1999-443621/37.

XX
PT Macrophage derived chemokine analogues useful for inhibiting
PT macrophage derived chemokine-induced chemotaxis

XX
PS Claim 1; Column 59; 43pp; English.

XX
CC The present sequence represents a macrophage derived chemokine (MDC)
CC analogue. The MDC analogue is capable of inhibiting MDC induced
CC chemotaxis. Therefore, the MDC analogue may be used to modulate
CC inflammatory and immune responses allowing for the treatment of
CC disorders associated with excessive inflammation or overactive immune
CC responses. Inflammatory disorders which may be treated in this way
CC include Crohn's disease (manifested by chronic inflammation of the
CC bowel), atherosclerosis, arthritis and pulmonary fibrosis.

XX
SQ Sequence 70 AA;

Query Match 95.5%; Score 362; DB 20; Length 70;

Best Local Similarity 94.2%; Pred. No. 1.1e-39;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKEICADPRVPWV 60

DB 2 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRPGVLLTFRDKEICADPRVPWV 61

QY 61 KMILNKLSQ 69

DB 62 KMILNKLSQ 70

RESULT 8

AAI05873

ID AAI05873 standard; Protein; 70 AA.

XX
AC AAI05873;

XX
DT 02-AUG-1999 (first entry)

XX
DE Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).

XX
KW MDC analogue; macrophage derived chemokine; C-C chemokine; human;
KW antagonist; chemoattractant; antiproliferative; dermatological;
KW immunosuppressive; antinflammatory; antitumor; antitumor;
KW asthma; allergy; HIV; infection; lupus erythematosus; therapy;
KW vaccine.

XX
OS Homo sapiens.

XX
OS Synthetic.

PN WO9915666-A2.
 XX
 PD 01-APR-1999.
 XX
 PF 28-SEP-1998; 98WO-US20270.
 XX
 PR 28-APR-1998; 98US-0067447.
 PR 26-SEP-1997; 97US-0939107.
 XX
 PA (ICOS-) ICOS CORP.
 XX
 PI Chantry DH, Deeley MC, Godiska R, Gray PW, Raport CJ;
 XX WPI; 1999-254715/21.
 XX
 DR Vertebate Macrophage Derived Chemokines, analogues and antagonists
 XX
 PT Example 11; Page 134; 147pp; English.
 PS
 SS
 XX The present sequence represents synthetic analogue MDC(n+1) of the
 CC novel human macrophage derived C-C chemokine MDC (see also AAY05871).
 CC MDC(n+1) consists of a Leu residue following by amino acid residues
 CC 1-69 of the MDC mature polypeptide. The analogue is expected to be
 CC an antagonist of MDC activity, inhibiting activity by competitively
 CC binding to the receptor that recognises MDC or by forming inactive
 CC heterodimers with MDC. MDC antagonists are used in claimed methods
 CC for the preparation of medicaments for the suppression of the
 CC proliferation of a mammalian immunodeficiency virus, for inhibiting
 CC platelet aggregation in a mammal, for the treatment or palliation
 CC of lupus erythematosus in a mammal, for inhibiting MDC-induced
 CC activation, chemotaxis or proliferation of cells that express CCR4,
 CC for inhibiting or palliating an allergic reaction in a mammal, and
 CC for treating asthma.
 XX
 SQ Sequence 70 AA;
 Query Match 95.5%; Score 362; DB 20; Length 70;
 Best Local Similarity 94.2%; Pred. No. 1.1e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GPGANNEDSVCCRDYVRYRLPLRVKVEYFTSDSCPRPGVLLTFRDKEICADPRVPWV 60
 DB 2 GPGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 61
 QY 61 KMILNKLSQ 69
 DB 62 KMILNKLSQ 70
 RESULT 9
 AAW59432
 ID AAW59432 standard; Protein; 86 AA.
 XX
 AC AAW59432;
 XX
 DT 27-AUG-1998 (first entry)
 XX
 DE Human chemokine protein 331D5 from CD1a+ cDNA library.
 XX
 KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..15
 FT /label= signal
 FT /note= "partial signal sequence"
 FT Protein 16..86
 FT /label= chemokine protein 331D5
 XX
 PN WO9811226-A2.

XX 19-MAR-1998.
 PD
 XX 09-SEP-1997; 97WO-US15315.
 PF
 XX 10-SEP-1996; 96US-0025724.
 PR
 XX (SCHE) SCHERING CORP.
 PA
 XX Gorman DM, Hedrick JA, Zlotnik A;
 PI
 XX WPI; 1998-207387/18.
 DR N-PSDB; AAV34996.
 DR
 XX Mammalian CC and CXC chemokines - useful for treatment of, e.g.
 PT cancer and degenerative conditions
 PT
 XX Disclosure; Page 75; 82pp; English.
 PS
 XX This sequence represents a novel human chemokine protein, 331D5 which has
 CC been isolated from a 90 per cent CD1a+ cDNA library and obtained by
 CC random sequencing. Nucleic acid sequences encoding the chemokines can be
 CC used for detection, in e.g. forensic techniques. Antibodies and other
 CC binding agents may be used in diagnostics. The chemokines themselves are
 CC useful for treatment of, e.g. cancer or degenerative conditions. Abnormal
 CC proliferation, regeneration, degeneration or atrophy may be treated by
 CC the inventive compositions.
 XX
 SQ Sequence 86 AA;
 Query Match 95.5%; Score 362; DB 19; Length 86;
 Best Local Similarity 94.2%; Pred. No. 1.4e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GPGANNEDSVCCRDYVRYRLPLRVKVEYFTSDSCPRPGVLLTFRDKEICADPRVPWV 60
 DB 18 GPGANNEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVLLTFRDKEICADPRVPWV 77
 QY 61 KMILNKLSQ 69
 DB 78 KMILNKLSQ 86
 RESULT 10
 AAW20058
 ID AAW20058 standard; Protein; 93 AA.
 XX
 AC AAW20058;
 XX
 DT 11-SEP-1997 (first entry)
 XX
 DE Macrophage derived chemokine for treating inflammation.
 XX
 KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
 KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;
 KW wound healing; angiogenesis; inflammation.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24
 FT /label= sig_peptide
 FT Protein 25..93
 FT /label= mat_protein
 XX
 PN WO9640923-A1.
 XX
 PD 19-DEC-1996.
 XX
 PF 07-JUN-1996; 96WO-US10114.
 FT
 XX 16-NOV-1995; 95US-0558658.
 PR 07-JUN-1995; 95US-0479620.
 PR

XX (ICOS-) ICOS CORP.
 PA Godiska R, Gray PW;
 PI WPI; 1997-052324/05.
 XX N-PSDB; AAT76529.
 DR
 XX Macrophage derived chemokine (MDC) and analogues - used in the
 PT treatment of inflammatory diseases, MDC antibodies used to treat
 PT Crohn's disease, rheumatoid arthritis, etc.
 XX
 PS Claim 1; Page 73; 106pp; English.
 CC
 CC A new macrophage derived chemokine, MDC, a member of the C-C
 CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and its
 CC analogues may be used in the treatment of inflammatory diseases
 CC especially diseases characterised by monocyte chemotaxis towards a
 CC site of inflammation. MDC and its analogues also induce fibroblast
 CC proliferation having a positive effect in wound healing and
 CC angiogenesis. They may prove to be clinically important in the
 CC treatment of tumours, by directly or indirectly inhibiting tumour
 CC formation. Antibodies directed against MDC and its analogues may be
 CC used in the treatment of Crohn's disease, rheumatoid arthritis and
 CC atherosclerosis. Probes and/or primers for the identification of MDC
 CC encoding sequences can be derived from MDC encoding sequences.
 XX
 XX Sequence 93 AA;
 SQ
 Query Match 95.5%; Score 362; DB 18; Length 93;
 Best Local Similarity 94.2%; Pred. No. 1.5e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 11
 AAW62783
 ID AAW62783 standard; Protein; 93 AA.
 XX
 AC AAW62783;
 XX
 DT 24-SEP-1998 (first entry)
 XX
 DE Amino acid sequence of human STCP-1.
 XX
 KW Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
 KW inhibitory compound; assay; reduce; circulatory system STCP-1 level;
 KW joint inflammation; rheumatoid arthritis; lupus.
 XX
 OS Homo sapiens.
 XX
 PN WO9824907-A1.
 XX
 PD 11-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US21552.
 XX
 PR 03-DEC-1996; 96US-0760127.
 XX
 XX (AMGE-) AMGEN INC.
 PA Andrew DP, Chang M;
 PI WPI: 1998-333326/29.
 DR N-PSDB; AAV38933.
 XX
 XX
 PT Human STCP-1 polypeptides with chemokine activity - useful e.g. to
 PT treat HIV infection or other viral or bacterial pathogens infecting
 XX T-cells, macrophages or other immune system cells
 PS Claim 1; Fig 2A-F; 96pp; English.
 CC
 CC The present sequence represents human STCP-1. STCP-1 polypeptides
 CC demonstrate chemokine activity for T-cells. The polypeptides are useful
 CC prophylactically or therapeutically to treat HIV infection and other
 CC conditions associated with viral/bacterial pathogens infecting T-cells,
 CC macrophages or other immune system cells. They can be included
 CC (optionally chemically modified) with a pharmaceutically acceptable
 CC carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.)
 CC in therapeutic compositions for treating these conditions. STCP-1 also
 CC useful to assay for inhibitory compounds used to reduce circulatory
 CC system STCP-1 levels to alleviate e.g. joint inflammation associated
 CC with rheumatoid arthritis, lupus or other autoimmune diseases. The
 CC polypeptides are also useful to prepare antibodies or hybridomas. The
 CC nucleic acids are useful to produce hybridisation probes to test for
 CC STCP-1 DNA/RNA in mammalian samples.
 XX
 XX Sequence 93 AA;
 SQ
 Query Match 95.5%; Score 362; DB 19; Length 93;
 Best Local Similarity 94.2%; Pred. No. 1.5e-39;
 Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
 DB 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 84
 QY 61 KMILNKLQ 69
 DB 85 KMILNKLQ 93
 RESULT 12
 AAW59433
 ID AAW59433 standard; Protein; 93 AA.
 XX
 AC AAW59433;
 XX
 DT 27-AUG-1998 (first entry)
 XX
 DE Human chemokine protein 331D5.
 XX
 KW Chemokine; human; detection; forensic; diagnostic; treatment; cancer;
 KW degenerative condition; abnormal proliferation; regeneration;
 KW degeneration; atrophy.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..24 /label= signal
 FT Protein 25..93 /label= 331D5
 FT /note= "chemokine protein"
 XX
 PN WO9811226-A2.
 XX
 PD 19-MAR-1998.
 XX
 PF 09-SEP-1997; 97WO-US15315.
 XX
 PR 10-SEP-1996; 96US-0025724.
 XX
 XX (SCHE) SCHERING CORP.
 PA Gorman DM, Hedrick JA, Zlotnik A;
 PI WPI: 1998-207387/18.
 DR N-PSDB; AAV34997.
 XX

XX Mammalian CC and CXC chemokines - useful for treatment of, e.g.
PT cancer and degenerative conditions
PS Claim 1; Page 78; 82pp; English.
XX This sequence represents a novel human chemokine protein, 331D5.
CC Nucleic acid sequences encoding the chemokines can be used for detection,
CC in e.g. forensic techniques. Antibodies and other binding agents may be
CC used in diagnostics. The chemokines themselves are useful for treatment
CC of, e.g. cancer or degenerative conditions. Abnormal proliferation,
CC regeneration, degeneration or atrophy may be treated by the inventive
CC compositions.
XX
XX Sequence 93 AA;
Query Match 95.5%; Score 362; DB 19; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.5e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVKEYEFTSDSPRGVLLTFRDKKEICADPRVPWV 60
DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVKEYEFTSDSPRGVLLTFRDKKEICADPRVPWV 84
QY 61 KMLNKLQS 69
DB 85 KMLNKLQS 93
RESULT 13
AAW40811
ID AAW40811 standard; Protein; 93 AA.
AC AAW40811;
XX 01-APR-1998 (first entry)
DT Macrophage-derived chemokine.
DE Macrophage-derived chemokine.
XX Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
KW arthritis; inflammatory disorder; cancer; Crohn's disease;
KW atherosclerosis.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..24
FT /note= "leader peptide"
FT Protein 25..93
FT /note= "mature protein"
XX US5688927-A.
XX 18-NOV-1997.
XX 07-JUN-1995; 95US-0480449.
XX 07-JUN-1995; 95US-0480449.
XX (ICOS-) ICOS CORP.
XX Godiska R, Gray PW;
XX WPI: 1998-008038/01.
XX N-PSDB; AAT99233.
XX Antibodies specific for macrophage-derived chemokine - useful for
PT purifying or detecting the chemokine or modulating its activity
XX
XX Claim 3; Column 21-24; 22pp; English.
XX This sequence represents the macrophage-derived chemokine (MDC). This
CC protein is used to produce the antibodies of the invention. The

CC antibodies are useful for purifying MDC polypeptides, for detecting
CC endogenous MDC in a host, and for modulating binding of MDC to its
CC receptors. The DNA encoding this sequence can be used for identifying and
CC isolating non-human MDC homologues. The MDC protein is potentially useful
CC for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
CC be used for treating Crohn's disease, arthritis, atherosclerosis etc.
XX
XX Sequence 93 AA;
Query Match 95.5%; Score 362; DB 19; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.5e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPYGANNEDSVCCRDYVRYRLPLRVVKEYEFTSDSPRGVLLTFRDKKEICADPRVPWV 60
DB 25 GPYGANNEDSVCCRDYVRYRLPLRVVKEYEFTSDSPRGVLLTFRDKKEICADPRVPWV 84
QY 61 KMLNKLQS 69
DB 85 KMLNKLQS 93
RESULT 14
AAW26175
ID AAW26175 standard; Protein; 93 AA.
AC AAW26175;
XX 29-SEP-1999 (first entry)
DT Macrophage-derived chemokine.
DE Macrophage-derived chemokine.
XX Macrophage-derived chemokine; MDC; vaccine; immune response; antigen;
KW humoral response; cell-mediated response; PCR; immunostimulatory;
KW expression plasmid vector.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..24
FT /note= "signal peptide"
FT Protein 25..93
FT /note= "mature macrophage-derived chemokine"
XX WO929728-A1.
XX 17-JUN-1999.
XX 11-DEC-1998; 98WO-US26291.
XX 11-DEC-1997; 97US-0069281.
XX (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
XX Devico AL, Gallo RC, Garzino-Demo A;
XX WPI: 1999-385578/32.
XX N-PSDB; AAX80630.
XX Methods of enhancing vaccine efficacy
XX Claim 6; Fig 1A(1)-1A(2); 134pp; English.
XX The present sequence is macrophage-derived chemokine. This belongs to
CC the CC class of chemokines. The efficacy of a vaccine is enhanced by
CC combining it with one or more chemokines to enhance the immune response
CC to an antigen. This can be humoral or cell-mediated immune response. The
CC purified chemokines, fragments, derivatives or analogues are
CC administered either concurrently with one or more purified antigens
CC against which an immune response is desired or within a time period
CC either before or after antigen administration. The chemokine gene is
CC isolated by PCR, and administered by constructing an expression plasmid
CC vector which can be expressed in a coordinated manner upon introduction

CC in a suitable cell. The vaccines are immunostimulatory and can be used CC to treat microbial diseases especially HIV.

CC to treat microbial diseases especially HIV.

XX	Sequence	93 AA;
SQ		

```

Query Match      95.58; Score 362; DB 20; Length 93;
Best Local Similarity 94.25; Pred. No. 1.5e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPYGANNEDSVCCCRDYYVRYRLPLRVVKEYEYFTSDSCPRPGVLLTFRDKICADPRVPWV 60
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 25 GPYGANNEDSVCCCRDYYVRYRLPLRVVKEYEYFTSDSCPRPGVLLTFRDKICADPRVPWV 84
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy 61 KMIILNKLSQ 69
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 85 KMIILNKLSQ 93
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

```

RESULT 15

AYY24414
ID AYY24414 standard; Protein; 93 AA.

AA AAY24414;
AC

DT 24-SEP-1999 (first entry)

Human macrophage derived chemokine.

Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.

OS Homo sapiens.

Location/Qualifiers

FT	Key	Local
FT	Peptide	1.:24

```
FT         repulse
1.:24
/label= signal
```

FT	Protein	FT	Label
FT	Protein	25..93	/label

PN US5932703-A.

03-AUG-1999.

AA 07-JUN-1996: 96US-0660542.

PR 07-JUN-1996: 96US-0660542.

PR	07-JUN-1996;	96US-0660342.
PR	07-JUN-1995:	95US-0479620.

PR 07-JUN-1995; 93US-04/9620.
PR 16-NOV-1995; 95US-0558658.

PA (ICOS-) ICOS CORP.

XX
PI Godiška R. Grav PW:

XX
NR WPT: 1999-443621/37

DR WPI; 1999-443621/
DR N-PSDB: AAX90162.

Macrophage derived chemokine analogues useful for inhibiting

PT macrophage derived chemokine-induced chemotaxis

XX
PS
claim 2: Column 41-43: 43pp: English.

The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis. The present sequence represents human MDC.

AA	Sequence	93 AA;
SQ		

Q5
A5

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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:59:58 ; Search time 5.79832 Seconds
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Total number of hits satisfying chosen parameters: 262574

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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4: /cgn2.6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2.6/ptodata/1/iaa/PC1US_COMB.pep.*
6: /cgn2.6/ptodata/1/iaa/backfiles1.pep.*

pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	379	100.0	69	2	US-08-660-542-32
2	362	95.5	70	2	US-08-660-542-30
3	362	95.5	93	1	US-08-480-449-2
4	362	95.5	93	1	US-08-660-542-2
5	362	95.5	93	4	US-09-232-878-6
6	362	95.5	93	4	US-08-479-603-2
7	362	95.5	93	5	PCR-US95-07294-2
8	350	92.3	69	2	US-08-660-542-31
9	322	85.0	93	2	US-08-660-542-25
10	156	41.2	95	4	US-09-230-637-26
11	154	40.6	68	4	US-09-141-833-5
12	153	40.4	89	1	US-08-208-339A-4
13	153	40.4	89	3	US-08-722-719-6
14	152	40.1	68	2	US-08-936-387-17
15	151	39.8	70	4	US-09-334-951-65
16	151	39.8	89	4	US-09-334-951-6
17	149	39.3	78	1	US-08-375-346A-6
18	149	39.3	78	2	US-08-467-123B-6
19	148	39.1	67	4	US-09-141-833-2
20	148	39.1	68	2	US-08-936-387-1
21	148	39.1	68	2	US-08-615-232A-11
22	148	39.1	68	3	US-08-470-323-11
23	148	39.1	68	4	US-08-836-922-1
24	148	39.1	68	4	US-09-141-833-1
25	148	39.1	69	4	US-08-836-922-2
26	148	39.1	69	4	US-08-836-922-3
27	148	39.1	69	4	US-08-836-922-4

28	148	39.1	73	2	US-08-936-387-13	Sequence 13, Appl
29	148	39.1	76	4	US-08-836-922-20	Sequence 20, Appl
30	148	39.1	90	4	US-09-230-637-40	Sequence 40, Appl
31	148	39.1	91	1	US-08-347-492B-12	Sequence 12, Appl
32	148	39.1	91	1	US-08-375-348A-5	Sequence 5, Appl
33	148	39.1	91	1	US-08-480-449-21	Sequence 21, Appl
34	148	39.1	91	2	US-08-633-682-3	Sequence 3, Appl
35	148	39.1	91	2	US-08-421-144A-8	Sequence 8, Appl
36	148	39.1	91	2	US-08-660-542-21	Sequence 21, Appl
37	148	39.1	91	2	US-08-798-143-12	Sequence 12, Appl
38	148	39.1	91	2	US-08-467-123B-5	Sequence 5, Appl
39	148	39.1	91	3	US-08-936-772-3	Sequence 3, Appl
40	148	39.1	91	4	US-08-836-922-14	Sequence 14, Appl
41	148	39.1	91	4	US-09-395-918-3	Sequence 3, Appl
42	148	39.1	91	4	US-08-679-493A-155	Sequence 155, App
43	148	39.1	91	4	US-08-479-603-21	Sequence 21, Appl
44	148	39.1	91	4	US-09-230-371A-25	Sequence 25, Appl
45	146	38.5	68	2	US-08-716-188-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-08-660-542-32
: Sequence 32, Application US/08660542
: Patent No. 5932703
: GENERAL INFORMATION:
: APPLICANT: Godiska, Ronald
: APPLICANT: Gray, Patrick W.
: TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE.
: TITLE OF INVENTION: ANALOGS
: NUMBER OF SEQUENCES: 32
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
: STREET: 6300 Sears Tower, 233 South Wacker Drive
: CITY: Chicago
: STATE: Illinois
: COUNTRY: United States of America
: ZIP: 60606-6402
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/660,542
: FILING DATE:
: CLASSIFICATION: 514
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/558,658
: FILING DATE: 16-NOV-1995
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/479,620
: FILING DATE: 07-JUN-1995
: ATTORNEY/AGENT INFORMATION:
: NAME: Gass, David A.
: REGISTRATION NUMBER: 38,153
: REFERENCE/DOCKET NUMBER: 27866/33318
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 312/474-6300
: TELEFAX: 312/474-0448
: TELEX: 25-3856
: INFORMATION FOR SEQ ID NO: 32:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 69 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
: US-08-660-542-32

Query Match 100.0% Score 379; DB 2; Length 69;

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-Best Local Similarity 100.08; Pred. No. 3.4e-43;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCRPGVGVLLTFRDKKEICADPRVPWV 60
Db 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCRPGVGVLLTFRDKKEICADPRVPWV 60
Qy 61 KMLNKLQ 69
Db 61 KMLNKLQ 69

RESULT 2
US-08-660-542-30
; Sequence 30, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-660-542-30

Query Match 95.5%; Score 362; DB 2; Length 70;
Best Local Similarity 94.2%; Pred. No. 6.2e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCRPGVGVLLTFRDKKEICADPRVPWV 60
Db 2 GPGANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCRPGVGVLLTFRDKKEICADPRVPWV 61
Qy 61 KMLNKLQ 69
Db 62 KMLNKLQ 70
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RESULT 3
US-08-480-449-2
; Sequence 2, Application US/08480449
; Patent No. 5688927
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,449
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32779
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-480-449-2

Query Match 95.5%; Score 362; DB 1; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCRPGVGVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCRPGVGVLLTFRDKKEICADPRVPWV 84
Qy 61 KMLNKLQ 69
Db 85 KMLNKLQ 93

RESULT 4
US-08-660-542-2
; Sequence 2, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-660-542-2

Query Match 95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVVLLTFRDKEICADRPVWV 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVVLLTFRDKEICADRPVWV 84
QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 5
US-09-232-878-6
Sequence 6, Application US/09232878
Patent No. 6245332
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijian
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: US/09/232,878
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
TYPE: PRT
ORGANISM: H. sapiens
US-09-232-878-6

Query Match 95.5%; Score 362; DB 4; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVVLLTFRDKEICADRPVWV 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVVLLTFRDKEICADRPVWV 84
QY 61 KMILNKLSQ 69

Db 85 KMILNKLSQ 93
RESULT 6
US-08-479-603-2
Sequence 2, Application US/08479603
Patent No. 6320023
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32780
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-603-2

Query Match 95.5%; Score 362; DB 4; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVVLLTFRDKEICADRPVWV 60
Db 25 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVVLLTFRDKEICADRPVWV 84
QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 7
PCT-US95-07294-2
Sequence 2, Application PC/TUS9507294
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESS: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/07294
; FILING DATE: June 6, 1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/464,594
; FILING DATE: June 5, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-356
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; PCT-US95-07294-2

Query Match 95.5%; Score 362; DB 5; Length 93;
Best Local Similarity 94.2%; Pred. No. 8.8e-41;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRRLPLRVVKEYFYTSDSCPRGCVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANNEDSVCCRDYVRRLPLRVVKEYFYTSDSCPRGCVLLTFRDKKEICADPRVPWV 84
QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 8
US-08-660-542-31
; Sequence 31, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995

; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELETYPE: 25-3856
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 69 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-660-542-31

Query Match 92.3%; Score 350; DB 2; Length 69;
Best Local Similarity 91.3%; Pred. No. 2.4e-39;
Matches 63; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANNEDSVCCRDYVRRLPLRVVKEYFYTSDSCPRGCVLLTFRDKKEICADPRVPWV 60
Db 1 GPGANNEDSVCCRDYVRRLPLRVVKEYFYTSDSCPRGCVLLTFRDKKEICADPRVPYL 60
QY 61 KMILNKLSQ 69
Db 61 KMILNKLSQ 69

RESULT 9
US-08-660-542-25
; Sequence 25, Application US/08660542
; Patent No. 5932703
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
; TITLE OF INVENTION: ANALOGS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,542
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/33318
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELETYPE: 25-3856
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids

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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Protein
LOCATION: 1..69
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
/note="The amino acid at position 24 is selected from the
OTHER INFORMATION: group consisting of arginine, glycine, alanine,
OTHER INFORMATION: valine, leucine, isoleucine, proline, serine,
OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
OTHER INFORMATION: and methionine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
/note="The amino acid at position 27 is independently
OTHER INFORMATION: selected from the group consisting of lysine, glycine,
OTHER INFORMATION: alanine, valine, leucine, isoleucine, proline, serine,
OTHER INFORMATION: threonine, phenylalanine, tyrosine, tryptophan,
OTHER INFORMATION: aspartate, glutamate, asparagine, glutamine, cysteine,
OTHER INFORMATION: and methionine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
/note="The amino acid at position 30 is independently
OTHER INFORMATION: selected from the group consisting of tyrosine,
OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
/note="The amino acid at position 50 is independently
OTHER INFORMATION: selected from the group consisting of glutamic acid,
OTHER INFORMATION: lysine, arginine, histidine, glycine, and alanine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
/note="The amino acid at position 59 is independently
OTHER INFORMATION: selected from the group consisting of tryptophan,
OTHER INFORMATION: serine, lysine, arginine, histidine, aspartate,
OTHER INFORMATION: glutamate, asparagine, glutamine, and cysteine."
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION:
/note="The amino acid at position 60 is independently
OTHER INFORMATION: selected from the group consisting of valine, serine,
OTHER INFORMATION: lysine, arginine, histidine, aspartate, glutamate,
OTHER INFORMATION: asparagine, glutamine, and cysteine."

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Query Match	85.0%;	Score 322;	DB 2;	Length 93;
Best Local Similarity	87.0%;	Pred. No. 1.8e-35;		
Matches	60;	Conservative 2;	Mismatches 7;	Indels 0; Gaps 0;
QY	1	GPYGANNESVCCRDYVRYRLPLRVVKXEYPTSDSCPRPGVLLTFRDKKICADRPVPWV	60	
Db	25	GPYGANNESVCCRDYVRYRLPLXVHXEHXTSDSCPRPGVLLTFRDKKICADRPVXX	84	
QY	61	KMILNLSQ	69	
Db	85	KMILNLSQ	93	

RESULT 10
US-09-230-637-26
; Sequence 26, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
; APPLICANT: Hayward, Gary

```

? APPLICANT: Nicholas, John
? APPLICANT: Hardwick, J. Marie
? APPLICANT: Reitz, Marvin
? TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
? TITLE OF INVENTION: Associated Herpesvirus
? FILE REFERENCE: 1107-78372
? CURRENT APPLICATION NUMBER: US/09/230,637
? CURRENT FILING DATE: 1999-11-23
? PRIOR APPLICATION NUMBER: 60/022,591
? PRIOR FILING DATE: 1996-07-25
? PRIOR APPLICATION NUMBER: PCT US 97/12931
? PRIOR FILING DATE: 1997-07-24
? NUMBER OF SEQ ID NOS: 62
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ ID NO 26
? LENGTH: 95
? TYPE: PRT
? ORGANISM: Kaposi's sarcoma-associated herpes-like virus
? US-09-230-637-26

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Query Match	41.28;	Score 156;	DB 4;	Length 95;
Best Local Similarity	42.96;	Pred. No. 1.9e-13;		
Matches	24;	Conservative 18;	Mismatches 14;	Indels 0; Gaps 0;
Qy	12	CCRDYVRYRLPLRVKVEFYFTSDSCPRPGVVLLTFDRKEICADPRVPWVKMLNKL	67	
Db	36	CCYGFOHPPPVOLIKEWPTSPACRPGVTLLTKRGROICADSKNNVRQLMORL	91	

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RESULT 11
US-09-141-833-5
; Sequence 5, Application US/09141833
; Patent No. 6168784
; GENERAL INFORMATION:
; APPLICANT: OFFORD, ROBIN E
; APPLICANT: THOMPSON, DARREN
; APPLICANT: WILKEN, JILL
; TITLE OF INVENTION: N-TERMINAL MODIFICATIONS OF RANTES AND METHODS OF USE
; FILE REFERENCE: GREN-026/03US
; CURRENT APPLICATION NUMBER: US/09/141,833
; CURRENT FILING DATE: 1998-08-28
; EARLIER APPLICATION NUMBER: 60/056,292
; EARLIER FILING DATE: 1997-09-03
; EARLIER APPLICATION NUMBER: 60/077,874
; EARLIER FILING DATE: 1998-03-13
; EARLIER APPLICATION NUMBER: 60/090,834
; EARLIER FILING DATE: 1998-06-26
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 68
; TYPE: prt
; ORGANISM: Homo sapiens
US-09-141-833-5

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Query Match	40.6%	Score 154;	DB 4;	Length 68;
Best Local Similarity	40.3%	Pred. No. 2.4e-13;		
Matches	27;	Conservative	14;	Mismatches 24; Indels 2; Gaps 1;
Qy	1	GPYGANNEDSVCCRDYVRYRLPLRVVKEYEYFTSDSCPRPGVLLTFRDKETICADPRVPW	60	
		: : : : : : : : : : : : : : :		
Db	1	GPYSS--DTTPCCFAYIARELPLRAHINEYFVFTSGKCSNPAAVVFYTRKNQVCANPEKKW	58	
Qy	61	KMLINKL	67	
		: : :		
Db	59	REVINSL	65	

RESULT 12
US-08-208-339A-4
; Sequence 4, Application US/08208339A
; Patent No. 5504003
; GENERAL INFORMATION:

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; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/722,719
; FILING DATE: 30-SEP-1996
; CLASSIFICATION: 435
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/173,209
; FILING DATE: 22-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/208,339
; FILING DATE: 08-MAR-1994
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/446,881
; FILING DATE: 05-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/465,682
; FILING DATE: 06-JUN-1995
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/468,775
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0330007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 89 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; PS-08-722-719-6

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Query Match
40.48; Score 153; DB 3; Length 89;

Best Local Similarity 42.2%; Pred. No. 4.5e-13;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

Qy	.4	GANNEDSVCCDRVYRVLPLRVVKEYEFTYSDSCPRGUVLLTFRKEICADDPVPWVKMI	630
Dd	24	GNKE--LCCLVYSWQPKFIVSETSPQCPRGVILLTKRGRIQCADPNKKWQKY	810
Qy	64	LNLK 67	
Dd	82	ISDL 85	

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: RESULT 14
: US-08-936-387-17
: Sequence 17, Application US/08936387
: Patent No. 5965697
:
: GENERAL INFORMATION:
:
: APPLICANT: Czaplowski, Llyod G.
: APPLICANT: Hunter, Michael G.
: APPLICANT: Edwards, Richard M.
: APPLICANT: Dawson, Keith M.
:
: TITLE OF INVENTION: USE OF CHEMOKINES
:
: NUMBER OF SEQUENCES: 18
:
: CORRESPONDENCE ADDRESS:
: ADDRESSER: HALE AND DORR LLP
: STREET: 60 State Street
: CITY: Boston
: STATE: MA
:
: COUNTRY: United States of America
: ZIP: 02109
:
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible

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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/936,387
FILING DATE: 25-SEP-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Baker, Hollie L.
REGISTRATION NUMBER: 31,321
REFERENCE/DOCKET NUMBER: 102378.262
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-526-6000
TELEFAX: 617-526-5000
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 68 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHEetical: NO
ANTI-SENSE: NO
US-08-936-387-17

Query Match 40.1%; Score 152; DB 2; Length 68;
Best Local Similarity 40.3%; Pred. No. 4.4e-13;
Matches 27; Conservative 14; Mismatches 24; Indels 2; Gaps 1;
QY 2 PYCANMEDSVCCRDYVRYRLPLRVVKEYFTYSDCPRGVLLTFRDKEICADPRVPWVK 61
DB 2 PYSS--DTTPCCPAYIARPLPRAHIREYFTYSGKSCNPAYVYVTRKNRQVCANPEKKWVR 59
QY 62 MILNKL 68
DB 60 EYNSLS 66

RESULT 15
US-09-334-951-65
Sequence 65, Application US/09334951
Patent No. 6451562
GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
FILE REFERENCE: 1488.033000B
CURRENT APPLICATION NUMBER: US/09/334,951
EARLIER FILING DATE: 1999-06-17
EARLIER APPLICATION NUMBER: US 08/208,339
EARLIER FILING DATE: 1994-03-08
EARLIER APPLICATION NUMBER: US 08/446,881
EARLIER FILING DATE: 1995-05-05
EARLIER APPLICATION NUMBER: US 08/465,682
EARLIER FILING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: US 08/468,775
EARLIER FILING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: US 08/722,719
EARLIER FILING DATE: 1996-09-30
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 65
LENGTH: 70
TYPE: PRT
ORGANISM: Homo sapiens
US-09-334-951-65

Query Match 39.8%; Score 151; DB 4; Length 70;
Best Local Similarity 42.2%; Pred. No. 6.2e-13;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;
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Db 5 GTNKE--LCCLVYTSWQIPQKFIQVSETSPQCPKPGVMILLTKRGRQICADPNKKWQKY 62
QY 64 LNKL 67
Db 63 ISDL 66
Search completed: July 28, 2003, 04:05:37
Job time : 5.79832 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 04:04:49 ; Search time 9.42227 Seconds
(without alignments)
869.687 Million cell updates/sec

Title: US-09-509-165A-32

Perfect score: 379

Sequence: 1 GPGANNEDSVCCRDYVRYR.....EICADPRVPVKMILNLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 451899-seqs, 118759770 residues

Total number of hits satisfying chosen parameters: 451899

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA:*

- 1: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep.*
- 6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
- 7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
- 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
- 9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
- 10: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep1.*
- 11: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep2.*
- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep3.*
- 13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
- 15: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
- 17: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	362	95.5	93	10	US-09-837-446-6
2	362	95.5	93	11	US-09-811-088-2
3	362	95.5	93	15	US-10-314-410-2
4	357	94.2	93	10	US-09-908-599-2
5	357	94.2	93	10	US-09-908-600-2
6	264	69.7	68	15	US-10-001-221A-3
7	210.5	55.5	67	15	US-10-001-221A-7
8	189	49.9	37	10	US-09-864-761-43730
9	157	41.4	78	15	US-10-001-221A-6
10	156	41.2	71	10	US-09-144-838-3
11	153	40.4	69	11	US-09-792-793A-28
12	153	40.4	89	10	US-09-334-923A-6
13	153	40.4	89	10	US-09-334-954A-6
14	153	40.4	97	10	US-09-925-302-792
15	151	39.8	70	10	US-09-334-923A-65
16	151	39.8	70	10	US-09-334-954A-65

17	149	39.3	78	15	US-10-158-366-6	Sequence 6, Appli
18	148	39.1	67	10	US-09-144-838-41	Sequence 41, Appl
19	148	39.1	68	10	US-09-144-838-10	Sequence 10, Appl
20	148	39.1	68	10	US-09-144-838-42	Sequence 42, Appl
21	148	39.1	68	10	US-09-195-457-11	Sequence 11, Appl
22	148	39.1	68	11	US-09-792-793A-29	Sequence 29, Appl
23	148	39.1	91	8	US-08-927-939-21	Sequence 21, Appl
24	148	39.1	91	10	US-09-144-838-9	Sequence 9, Appli
25	148	39.1	91	10	US-09-834-795A-29	Sequence 29, Appl
26	148	39.1	91	12	US-09-834-794A-29	Sequence 29, Appl
27	148	39.1	91	12	US-09-920-137A-8	Sequence 8, Appli
28	148	39.1	91	12	US-09-537-858-1	Sequence 1, Appli
29	148	39.1	91	15	US-10-158-366-5	Sequence 5, Appli
30	148	39.1	91	15	US-10-057-275-8	Sequence 8, Appli
31	148	39.1	91	15	US-10-293-705-12	Sequence 12, Appl
32	146	38.5	89	10	US-09-834-795A-34	Sequence 34, Appl
33	146	38.5	89	12	US-09-834-794A-34	Sequence 34, Appl
34	144	38.0	60	11	US-09-888-938-5	Sequence 5, Appli
35	144	38.0	66	10	US-09-144-838-37	Sequence 37, Appl
36	144	38.0	66	12	US-09-537-858-2	Sequence 2, Appli
37	144	38.0	67	10	US-09-144-838-38	Sequence 38, Appl
38	143	37.7	73	10	US-09-144-838-6	Sequence 6, Appli
39	140	36.9	66	15	US-10-141-620-19	Sequence 19, Appl
40	140	36.9	69	10	US-09-195-457-9	Sequence 9, Appli
41	140	36.9	70	11	US-09-792-793A-24	Sequence 24, Appl
42	140	36.9	91	15	US-10-153-064-3	Sequence 3, Appli
43	140	36.9	92	8	US-08-927-939-19	Sequence 19, Appl
44	140	36.9	92	10	US-09-151-450-3	Sequence 3, Appli
45	140	36.9	92	10	US-09-908-599-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-09-837-446-6
; Sequence 6, Application US/09837446
; Patent No. US20020019341A1
; GENERAL INFORMATION:
; APPLICANT: Butcher, Eugene C.
; APPLICANT: Campbell, James B.
; APPLICANT: Rottman, James B.
; APPLICANT: Wu, Lijian
; TITLE OF INVENTION: Modulation of Systemic Memory T Cell
; TITLE OF INVENTION: Trafficking
; FILE REFERENCE: STAN-110CON
; CURRENT APPLICATION NUMBER: US/09/837,446
; PRIOR FILING DATE: 2001-04-17
; PRIOR APPLICATION NUMBER: 09/232,878
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 93
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-837-446-6

Query Match 95.5%; Score 362; DB 10; Length 93;
Best Local Similarity 94.2%; Pred. No. 4e+38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVKVEYFTSDSCPRPGVLLTFRDKEICADPRVPW 60
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Db 25 GPGANNEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKEICADPRVPW 84
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Qy 61 KMIILNLSQ 69

Db 85 KMIILNLSQ 93

RESULT 2

US-09-811-088-2

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; PRIOR APPLICATION NUMBER: US 09/354,809
; PRIOR FILING DATE: 1999-07-16
; PRIOR APPLICATION NUMBER: US 08/938,365
; PRIOR FILING DATE: 1997-09-26
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-314-410-2

Query Match          95.5%; Score 362; DB 15; Length 93;
Best Local Similarity 94.2%; Pred. No. 4e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      1 GPGANMEDSVCCRDYVRYRLPLRVVVKFYFTSDSCPRPGVVLLTFRDKEICADPRVPW 60
        |||||||
Db      25 GPGANMEDSVCCRDYVRYRLPLRVVVKFYFTSDSCPRPGVVLLTFRDKEICADPRVPW 84
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QY      61 KMILNLSQ 69
        |||||||
Db      85 KMILNLSQ 93

RESULT 4
US-09-908-599-2
; Sequence 2, Application US/09908599
; Patent No. US2002005147A1
; GENERAL INFORMATION:
; APPLICANT: Li, Haodong et al.
; TITLE OF INVENTION: Human Chemokine Beta 13
; FILE REFERENCE: PF177P3
; CURRENT APPLICATION NUMBER: US/09/908,599
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/432,768
; PRIOR FILING DATE: 1999-11-03
; PRIOR APPLICATION NUMBER: 60/032,432
; PRIOR FILING DATE: 1996-12-05
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2

Query Match          94.2%; Score 357; DB 10; Length 93;
Best Local Similarity 92.8%; Pred. No. 1.7e-37;
Matches 64; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY      1 GPGANMEDSVCCRDYVRYRLPLRVVVKFYFTSDSCPRPGVVLLTFRDKEICADPRVPW 60
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Db      25 GPGANMEDSVCCRDYVRYRLPLRVVVKFYFTSDSCPRPGVVLLTFRDKEICADPRVPW 84
        |||||||

QY      61 KMILNLSQ 69
        |||||||
Db      85 KMILNLSQ 93

RESULT 5
US-09-908-600-2
; Sequence 2, Application US/09908600
; Patent No. US20020098545A1
; GENERAL INFORMATION:
; APPLICANT: LI, HAODONG
; SEIBUL, GEORGE
; TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE.

```


STATE: MD
COUNTRY: 20850
ZIP: US
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2
Query Match 94.2%; Score 357; DB 10; Length 93;
Best Local Similarity 92.8%; Pred. No. 1.7e-37;
Matches 64; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
Qy 1 GPYGANNEDSVCCRDYVYRLPLRVVKEYFYVTSDCRPPGVVLLTFRDKKEICADPRVPWV 60
Db 25 GPYGANNEDSVCCRDYVYRLPLRVVKEYFYVTSDCRPPGVVLLTFRDKKEICADPRVPWV 84
Qy 61 KMLNKLQS 69
Db 85 KMLNKLQS 93
RESULT 6
US-10-001-221A-3
Sequence 3, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 68
TYPE: PRT
ORGANISM: Homo sapiens
US-10-001-221A-3
Query Match 69.7%; Score 264; DB 15; Length 68;
Best Local Similarity 64.7%; Pred. No. 6e-26;
Matches 44; Conservative 16; Mismatches 8; Indels 0; Gaps 0;
Qy 1 GPYGANNEDSVCCRDYVYRLPLRVVKEYFYVTSDCRPPGVVLLTFRDKKEICADPRVPWV 60
Db 1 GPYGANNEDSVCCRDYVYRLPLRVVKEYFYVTSDCRPPGVVLLTFRDKKEICADPRVPWV 60

Qy 61 KMLNKLQS 68
Db 61 KMLNKLQS 68
RESULT 7
US-10-001-221A-7
Sequence 7, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
LENGTH: 67
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Chimeric molecule
US-10-001-221A-7
Query Match 55.5%; Score 210.5; DB 15; Length 67;
Best Local Similarity 58.5%; Pred. No. 3.1e-19;
Matches 38; Conservative 14; Mismatches 8; Indels 5; Gaps 1;
Qy 9 DSV-----CCRDYVYRLPLRVVKEYFYVTSDCRPPGVVLLTFRDKKEICADPRVPWVKMI 63
Db 3 DSVSIPITCCODYIRHPLPSRLVREFFWTSCKRPGVLLTVKNRDICADPRQVWVKKL 62
Qy 64 LNKLS 68
Db 63 LHKLS 67
RESULT 8
US-09-864-761-43730
Sequence 43730, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aecomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/006666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/006667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/006664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/006669
PRIOR FILING DATE: 2001-01-30

;; PRIOR APPLICATION NUMBER: PCT/US01/00665
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00668
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00663
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00662
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00661
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: PCT/US01/00670
;; PRIOR FILING DATE: 2001-01-30
;; PRIOR APPLICATION NUMBER: US 60/234,687
;; PRIOR FILING DATE: 2000-09-21
;; PRIOR APPLICATION NUMBER: US 09/608,408
;; PRIOR FILING DATE: 2000-06-30
;; PRIOR APPLICATION NUMBER: US 09/774,203
;; PRIOR FILING DATE: 2001-01-29
;; NUMBER OF SEQ ID NOS: 49117
;; SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
;; SEQ ID NO 43730
;; LENGTH: 37
;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; FEATURE:
;; OTHER INFORMATION: MAP TO AC004382.1
;; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 6.3
;; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
;; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
;; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.66
;; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
;; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
;; OTHER INFORMATION: EST HUMAN HIT: W61220.1, EVALUATE 8.50e-01
;; OTHER INFORMATION: SWISSPROT HIT: O00626, EVALUATE 3.00e-18
US-09-864-761-43730

Query Match 49.9%; Score 189; DB 10; Length 37;
Best Local Similarity 89.2%; Pred. No. 8.4e-17;
Matches 33; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 5 ANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRGV 41
DB 1 ANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRGV 37

RESULT 9
US-10-001-221A-6
;; Sequence 6, Application US/10001221A
;; Publication No. US20030108515A1
;; GENERAL INFORMATION:
;; APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
;; TITLE OF INVENTION: Zheng, Wei Premack, Brett Howard, Maureen
;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
;; FILE REFERENCE: 10709/14
;; CURRENT APPLICATION NUMBER: US/10/001,221A
;; CURRENT FILING DATE: 2001-10-30
;; PRIOR APPLICATION NUMBER: 09/834,814
;; PRIOR FILING DATE: 2001-04-20
;; NUMBER OF SEQ ID NOS: 7
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 6
;; LENGTH: 78
;; TYPE: PRT
;; ORGANISM: Artificial sequence
;; FEATURE:
;; OTHER INFORMATION: Chimeric molecule
US-10-001-221A-6

Query Match 41.4%; Score 157; DB 15; Length 78;
Best Local Similarity 40.8%; Pred. No. 2e-12;
Matches 29; Conservative 17; Mismatches 23; Indels 2; Gaps 2;

QY 1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRGVVL-LTFRDKEICADPRVP 58

DB 1 GPYGANVEDSICCFNVINRKIPQIRLESYTRITNIQCPKEAVIFKKTORQKEVCADPKER 60
QY 59 VVVKMLNKLKLSQ 69
DB 61 VVWRDSMKHLDDQ 71

RESULT 10

US-09-144-838-3
;; Sequence 3, Application US/09144838A
;; Patent No. US20020051996A1
;; GENERAL INFORMATION:
;; APPLICANT: Siani, Michael A.
;; APPLICANT: Wilken, Jill
;; APPLICANT: Simon, Reyna
;; APPLICANT: Kent, Stephen B.H.
;; TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
;; FILE REFERENCE: GRFN-020/01US
;; CURRENT APPLICATION NUMBER: US/09/144,838A
;; CURRENT FILING DATE: 1998-08-31
;; EARLIER APPLICATION NUMBER: US 60/057,620
;; EARLIER FILING DATE: 1997-09-04
;; NUMBER OF SEQ ID NOS: 54
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 3
;; LENGTH: 71
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-144-838-3

Query Match 41.2%; Score 156; DB 10; Length 71;
Best Local Similarity 42.9%; Pred. No. 2.4e-12;
Matches 24; Conservative 18; Mismatches 14; Indels 0; Gaps 0;

QY 12 CCRDYVRYRLPLRVVKEYFYTSDSCPRGVVLLTFRDKEICADPRVPVVKMLNKL 67
DB 12 CCYGFQHPPPVQILKWTPTSPACKPGVILLTKRGQICADPSKNVVRQLMQL 67

RESULT 11

US-09-792-793A-28
;; Sequence 28, Application US/09792793A
;; Patent No. US20020168370A1
;; GENERAL INFORMATION:
;; APPLICANT: McDonald, John R.
;; TITLE OF INVENTION: Coggin, Philip
;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
;; TITLE OF INVENTION: OTHER INFLAMMATORY CONDITIONS AND DISORDERS
;; FILE REFERENCE: 25020-601D
;; CURRENT APPLICATION NUMBER: US/09/792,793A
;; CURRENT FILING DATE: 2001-02-22
;; NUMBER OF SEQ ID NOS: 93
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 28
;; LENGTH: 69
;; TYPE: PRT
;; ORGANISM: homo sapien
;; FEATURE:
;; OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4)
US-09-792-793A-28

Query Match 40.4%; Score 153; DB 11; Length 69;
Best Local Similarity 42.2%; Pred. No. 5.5e-12;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY 4 GANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRGVVLLTFRDKEICADPRVPVVKM1 63
DB 4 GTNKE--LCCLVYTSNQIPQKEIVDYSETSPQCPKPGVILLTKRGQICADPNKKVQRY 61
QY 64 LNKL 67

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: COUNTRY: MACROPHAGE
: TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
: TITLE OF INVENTION: (As Amended)
: FILE REFERENCE: 1488. 033000C
: CURRENT APPLICATION NUMBER: US/09/334,954A
: CURRENT FILING DATE: 1999-06-17
: PRIOR APPLICATION NUMBER: US 08/208,339
: PRIOR FILING DATE: 1994-03-08
: PRIOR APPLICATION NUMBER: US 08/446,881
: PRIOR FILING DATE: 1995-05-05
: PRIOR APPLICATION NUMBER: US 08/465,682
: PRIOR FILING DATE: 1995-06-06
: PRIOR APPLICATION NUMBER: US 08/468,775
: PRIOR FILING DATE: 1995-06-06
: PRIOR APPLICATION NUMBER: US 08/722,719
: PRIOR FILING DATE: 1996-09-30
: NUMBER OF SEQ ID NOS: 65
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 6
: LENGTH: 89
: TYPE: PRT

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> Sequence 65, Application US/09334923A
> Patent No. US20020061551A1
> GENERAL INFORMATION:
> APPLICANT: Ruben, Steven M.
> APPLICANT: Li, Haodong
> TITLE OF INVENTION: Macrophage Inflammator
> FILE REFERENCE: 1488-033000D
> CURRENT APPLICATION NUMBER: US/09/334,923A
> CURRENT FILING DATE: 1999-06-17
> PRIOR APPLICATION NUMBER: US 08/208,339
> PRIOR FILING DATE: 1994-03-08
> PRIOR APPLICATION NUMBER: US 08/446,881
> PRIOR FILING DATE: 1995-05-05
> PRIOR APPLICATION NUMBER: US 08/465,682
> PRIOR FILING DATE: 1995-06-06
> PRIOR APPLICATION NUMBER: US 08/458,775
> PRIOR FILING DATE: 1995-06-06
> PRIOR APPLICATION NUMBER: US 08/722,719
> PRIOR FILING DATE: 1996-09-30
> NUMBER OF SEQ. ID NOS.: 65

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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 65
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-923A-65

Query Match      39.8%; Score 151; DB 10; Length 70;
Best Local Similarity 42.2%; Pred.No.1e-11;
Matches 27; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY      4 GANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVLLTFRDKKEICADPRVPWVKMI 63
Db      5 GTNKE--LCLVYTSWQIPQKFIVDYSETSPQCPKPGVLLTKRGRCICADPNKKWQKY 62
QY      64 LNKL 67
Db      63 ISDL 66
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Search completed: July 28, 2003, 04:20:05
Job time : 9.42227 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:00:39 ; Search time 79.1471 Seconds
(without alignments)
562.075 Million cell updates/sec

Title: US-09-509-165A-32
Perfect score: 379
Sequence: 1 GPYCANMEDSVCCRDYVYR.....EICADPRVPWVKMLNKLQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues
Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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4: /cgn2_6/ptodata/1/paa/US08_COMB.pep.*
5: /cgn2_6/ptodata/1/paa/US081_COMB.pep.*
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26: /cgn2_6/ptodata/1/paa/US102_COMB.pep.*
27: /cgn2_6/ptodata/1/paa/US60_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	379	100.0	69	13	US-08-939-107-32
2	379	100.0	69	14	US-09-067-447-32
3	379	100.0	69	14	US-09-067-447-32
4	379	100.0	69	14	US-09-067-447B-32
5	379	100.0	69	19	US-09-509-165A-32
6	362	95.5	69	27	US-60-412-866-1
					Sequence 32, Appl
					Sequence 32, Appl
					Sequence 32, Appl
					Sequence 32, Appl
					Sequence 1, Appli

7	362	95.5	70	13	US-08-939-107-30	Sequence 30, Appl
8	362	95.5	70	14	US-09-067-447-30	Sequence 30, Appl
9	362	95.5	70	14	US-09-067-447-30	Sequence 30, Appl
10	362	95.5	70	14	US-09-067-447B-30	Sequence 30, Appl
11	362	95.5	70	19	US-09-509-165A-30	Sequence 30, Appl
12	362	95.5	86	13	US-08-925-857-10	Sequence 10, Appl
13	362	95.5	93	1	PCT-US00-00953-6	Sequence 6, Appl
14	362	95.5	93	8	US-08-464-594-2	Sequence 2, Appl
15	362	95.5	93	8	US-08-479-620-2	Sequence 2, Appl
16	362	95.5	93	9	US-08-558-658-2	Sequence 2, Appl
17	362	95.5	93	11	US-08-760-127-3	Sequence 3, Appl
18	362	95.5	93	12	US-08-820-364-2	Sequence 2, Appl
19	362	95.5	93	13	US-08-925-857-12	Sequence 12, Appl
20	362	95.5	93	13	US-08-931-764-2	Sequence 2, Appl
21	362	95.5	93	13	US-08-931-764B-2	Sequence 2, Appl
22	362	95.5	93	13	US-08-939-107-2	Sequence 2, Appl
23	362	95.5	93	14	US-09-067-447-2	Sequence 2, Appl
24	362	95.5	93	14	US-09-067-447-2	Sequence 2, Appl
25	362	95.5	93	14	US-09-067-447B-2	Sequence 2, Appl
26	362	95.5	93	19	US-09-509-165A-2	Sequence 2, Appl
27	362	95.5	93	19	US-09-591-992-2	Sequence 2, Appl
28	362	95.5	93	21	US-09-712-726-2	Sequence 2, Appl
29	362	95.5	93	21	US-09-791-537-22726	Sequence 2, Appl
30	362	95.5	93	22	US-09-811-088-2	Sequence 2, Appl
31	362	95.5	93	22	US-09-837-446-6	Sequence 6, Appl
32	362	95.5	100	21	US-09-760-476-2007	Sequence 2007, Ap
33	362	95.5	100	21	US-09-760-481-204	Sequence 204, App
34	362	95.5	100	26	US-10-216-245-2007	Sequence 2007, Ap
35	362	95.5	100	26	US-10-216-388-204	Sequence 204, App
36	362	95.5	100	26	US-10-217-651-449	Sequence 449, App
37	362	95.5	154	13	US-08-939-107-40	Sequence 40, Appl
38	362	95.5	154	14	US-09-067-447-40	Sequence 40, Appl
39	362	95.5	154	14	US-09-067-447-40	Sequence 40, Appl
40	362	95.5	154	14	US-09-067-447B-40	Sequence 40, Appl
41	362	95.5	154	19	US-09-509-165A-40	Sequence 40, Appl
42	362	95.5	172	20	US-09-646-028-49	Sequence 49, Appl
43	362	95.5	334	20	US-09-646-028-53	Sequence 53, Appl
44	362	95.5	587	20	US-09-646-028-50	Sequence 50, Appl
45	357	94.2	93	1	PCT-US00-30237-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-08-939-107-32
; Sequence 32, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald
; APPLICANT: Gray, Patrick W.
; APPLICANT: Raport, Carol J.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/939.107
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995

;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/479,620
;; FILING DATE: 07-JUN-1995
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.
;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/33318
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 32:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 69 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-08-939-107-32

Query Match 100.0%; Score 379; DB 13; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
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DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
61 KMILNKLSQ 69
61 KMILNKLSQ 69

RESULT 2

US-09-067-447-32
;; Sequence 32, Application US/09067447
;; GENERAL INFORMATION:
;; APPLICANT: Godiska, Ronald
;; APPLICANT: Gray, Patrick W.
;; APPLICANT: Raport, Carol J.
;; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
;; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACT
;; NUMBER OF SEQUENCES: 44
;; CORRESPONDENCE ADDRESS:
;; ADDRESS: Marshall, O'Toole, Gerstein, Murray & Borun
;; STREET: 6300 Sears Tower, 233 South Wacker Drive
;; CITY: Chicago
;; STATE: Illinois
;; COUNTRY: United States of America
;; ZIP: 60606-6402
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/067,447
;; FILING DATE:
;; CLASSIFICATION:
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/939,107
;; FILING DATE: 26-SEPT-1997
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/660,542
;; FILING DATE: 7-JUN-1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/558,658
;; FILING DATE: 16-NOV-1995
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/479,620
;; FILING DATE: 07-JUN-1995
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Gass, David A.

;; REGISTRATION NUMBER: 38,153
;; REFERENCE/DOCKET NUMBER: 27866/34404
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 312/474-6300
;; TELEFAX: 312/474-0448
;; TELEX: 25-3856
;; INFORMATION FOR SEQ ID NO: 32:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 69 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-09-067-447-32

Query Match 100.0%; Score 379; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
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DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
61 KMILNKLSQ 69
61 KMILNKLSQ 69

RESULT 3

US-09-067-447-32
;; Sequence 32, Application US/09067447A
;; GENERAL INFORMATION:
;; APPLICANT: Godiska, Ronald
;; APPLICANT: Gray, Patrick W.
;; APPLICANT: Raport, Carol J.
;; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
;; TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
;; TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
;; FILE REFERENCE: 27866/34404
;; CURRENT APPLICATION NUMBER: US/09/067,447A
;; EARLIER FILING DATE: 1998-04-28
;; EARLIER FILING DATE: 1997-09-26
;; EARLIER FILING DATE: 1996-06-07
;; EARLIER FILING DATE: 1995-11-16
;; EARLIER FILING DATE: 1995-06-07
;; NUMBER OF SEQ ID NOS: 44
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 32
;; LENGTH: 69
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447-32

Query Match 100.0%; Score 379; DB 14; Length 69;
Best Local Similarity 100.0%; Pred. No. 4.5e-41;
Matches 69; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
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DB 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
61 KMILNKLSQ 69
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RESULT 4

RESULT 7
US-08-939-107-30
; Sequence 30, Application US/08939107
; GENERAL INFORMATION:
; APPLICANT: Godiska, Ronald

APPLICANT: GOOLSKA, RONALD
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: 08/939,107
EARLIER FILING DATE: 1997-09-26
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER FILING DATE: 1996-06-07
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER FILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/479,620
EARLIER FILING DATE: 1995-06-07


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; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447B-30

Query Match          95.5%; Score 362; DB 14; Length 70;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Db 2 GPGYANNEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADRPVW 61
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Db 62 KMILNKLQ 70

RESULT 10
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; Sequence 30, Application US/09067447B
; GENERAL INFORMATION:
; APPLICANT: Gray, Patrick W.
; APPLICANT: Chantry, David H.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
; TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
; TITLE OF INVENTION: ACTIVITY
; NUMBER OF SEQUENCES: 40
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; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
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; FILING DATE:
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; APPLICATION NUMBER: 08/939,107
; FILING DATE: 26-SEPT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/660,542
; FILING DATE: 7-JUN-1996
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; APPLICATION NUMBER: 08/558,658
; FILING DATE: 16-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/479,620
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/34404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 70 amino acids
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447B-30

Query Match          95.5%; Score 362; DB 14; Length 70;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Db 2 GPGYANNEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADRPVW 61
    |||||
QY 61 KMILNKLQ 69
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Db 62 KMILNKLQ 70

RESULT 11
US-09-509-165A-30
; Sequence 30, Application US/09509165A
; GENERAL INFORMATION:
; APPLICANT: Gray et al.
; TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
; TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
; FILE REFERENCE: 27866/34810
; CURRENT APPLICATION NUMBER: US/09/509,165A
; CURRENT FILING DATE: 2000-06-12
; PRIOR APPLICATION NUMBER: 09/067,447
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 08/939,107
; PRIOR FILING DATE: 1997-09-26
; PRIOR APPLICATION NUMBER: 08/660,542
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: 08/558,658
; PRIOR FILING DATE: 1995-11-16
; PRIOR APPLICATION NUMBER: 08/479,620
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-509-165A-30

Query Match          95.5%; Score 362; DB 19; Length 70;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGYANNEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADRPVW 60
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Db 2 GPGYANNEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADRPVW 61
    |||||
QY 61 KMILNKLQ 69
    |||||
Db 62 KMILNKLQ 70

RESULT 12
US-08-925-857-10
; Sequence 10, Application US/08925857
; GENERAL INFORMATION:
; APPLICANT: Gorman, Daniel M.
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
```

STREET: 901 California Avenue
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925.857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724
FILING DATE: 10-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0614K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 86 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-925-857-10

Query Match 95.5%; Score 362; DB 13; Length 86;
Best Local Similarity 94.2%; Pred. No. 1.1e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
Db 18 GPGANMEDSVCCRDYVRYRLPLRVVKHYFTSDSCPRGVVLLTFRDKEICADPRVPWV 77
QY 61 KMILNKLSQ 69
Db 78 KMILNKLSQ 86

RESULT 13
PCT-US00-00953-6
Sequence 6, Application PCT/TUS00000953
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijian
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: PCT/US00/00953
CURRENT FILING DATE: 2000-01-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
PCT-US00-00953-6

Query Match 95.5%; Score 362; DB 1; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.1e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKHYFTSDSCPRGVVLLTFRDKEICADPRVPWV 84

QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 14
US-08-464-594-2
Sequence 2, Application US/08464594
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELIA, BYRNE, BAIN, GILFILLAN,
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464.594
FILING DATE: June 5, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-443
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
US-08-464-594-2

Query Match 95.5%; Score 362; DB 8; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.1e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKYFYFTSDSCPRGVVLLTFRDKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKHYFTSDSCPRGVVLLTFRDKEICADPRVPWV 84
QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

RESULT 15
US-08-479-620-2
Sequence 2, Application US/08479620
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive

; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/479,620
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Gass, David A.
; REGISTRATION NUMBER: 38,153
; REFERENCE/DOCKET NUMBER: 27866/32628
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 93 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-479-620-2

Query Match 95.5%; Score 362; DB 8; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.le-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1 GPYGANNEDSVCCRDYRVYRLPLRVVKEYFYTSDCSPRCGVLLTFRDKKEICADPRYPWV 60
Db 25 GPYGANNEDSVCCRDYRVYRLPLRVVKEYFYTSDCSPRCGVLLTFRDKKEICADPRYPWV 84
QY 61 KMILNKLSQ 69
Db 85 KMILNKLSQ 93

Search completed: July 28, 2003, 04:14:54
Job time : 79.1471 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 04:02:59 ; Search time 24.3529 Seconds
(without alignments)
748.942 Million cell updates/sec

Title: US-09-509-165A-32
Perfect score: 379
Sequence: 1 GPGYANNMEDSVCCRDYVRYR.....EICADPRVPWVKMLNLSQ 69

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1232328 seqs, 264332421 residues
Total number of hits satisfying chosen parameters: 1232328

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New.*
1: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep.*
2: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep4.*
3: /cgn2_6/ptodata/2/paa/US05_NEW_COMB.pep.*
4: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4.*
5: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep.*
6: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep4.*
7: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep.*
8: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep4.*
9: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep.*
10: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep4.*
11: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep.*
12: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep4.*
13: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep.*
14: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	362	95.5	69	12 US-10-341-931-2	Sequence 2, Appli
2	362	95.5	93	2 PCT-US02-35606-109	Sequence 109, App
3	362	95.5	93	2 PCT-US02-35606-146	Sequence 146, App
4	362	95.5	93	2 PCT-US02-40891-473	Sequence 473, App
5	362	95.5	93	2 PCT-US02-40891-549	Sequence 549, App
6	362	95.5	93	2 PCT-US02-40891-638	Sequence 638, App
7	362	95.5	93	2 PCT-US02-40891-639	Sequence 639, App
8	362	95.5	93	2 PCT-US02-40891-640	Sequence 640, App
9	362	95.5	93	2 PCT-US02-40891-641	Sequence 641, App
10	362	95.5	93	12 US-10-314-410-2	Sequence 2, Appli
11	362	95.5	93	12 US-10-405-027-5105	Sequence 5105, Ap
12	362	95.5	93	12 US-10-445-790-2	Sequence 2, Appli
13	362	95.5	93	14 US-60-453-135-8659	Sequence 8659, Ap
14	362	95.5	93	14 US-60-453-050-8659	Sequence 8659, Ap
15	362	95.5	93	14 US-60-455-444-4765	Sequence 4765, Ap
16	362	95.5	93	14 US-60-463-241-4765	Sequence 4765, Ap
17	362	95.5	93	14 US-60-466-412-8659	Sequence 8659, Ap
18	362	95.5	172	12 US-10-335-394-49	Sequence 49, Appli
19	362	95.5	334	12 US-10-335-394-53	Sequence 53, Appli

20	362	95.5	587	12	US-10-335-394-50	Sequence 50, Appli
21	362	95.5	678	2	PCT-US02-40891-333	Sequence 333, App
22	357	94.2	93	12	US-10-285-572-2	Sequence 2, Appli
23	357	94.2	93	12	US-10-137-438A-2	Sequence 2, Appli
24	357	94.2	93	12	US-10-406-494-2	Sequence 2, Appli
25	356	93.9	677	2	PCT-US02-40891-422	Sequence 422, App
26	356	93.9	678	2	PCT-US02-40891-257	Sequence 257, App
27	349	92.1	676	2	PCT-US02-40891-424	Sequence 424, App
28	349	92.1	677	2	PCT-US02-40891-423	Sequence 423, App
29	342	90.2	676	2	PCT-US02-40891-425	Sequence 425, App
30	264	69.7	68	10	US-09-839-445-3	Sequence 3, Appli
31	264	69.7	68	12	US-10-001-221A-3	Sequence 3, Appli
32	210.5	55.5	67	10	US-09-839-445-7	Sequence 7, Appli
33	210.5	55.5	67	12	US-10-001-221A-7	Sequence 7, Appli
34	167.5	44.2	77	10	US-09-839-445-6	Sequence 6, Appli
35	157	41.4	78	12	US-10-001-221A-6	Sequence 6, Appli
36	133	40.4	69	11	US-10-375-209A-28	Sequence 28, Appli
37	153	40.4	89	2	PCT-US02-40891-546	Sequence 546, App
38	153	40.4	89	2	PCT-US02-40891-561	Sequence 561, App
39	153	40.4	89	2	PCT-US02-40891-562	Sequence 562, App
40	153	40.4	89	2	PCT-US02-40891-564	Sequence 564, App
41	153	40.4	89	2	PCT-US02-40891-565	Sequence 565, App
42	153	40.4	89	2	PCT-US02-40891-566	Sequence 566, App
43	153	40.4	89	2	PCT-US02-40891-567	Sequence 567, App
44	153	40.4	89	12	US-10-165-233A-6	Sequence 6, Appli
45	153	40.4	89	12	US-10-405-027-2964	Sequence 2964, Ap

ALIGNMENTS

RESULT 1
US-10-341-931-2
; GENERAL INFORMATION:
; Sequence 2, Application US/10341931
; APPLICANT: DeVico, Anthony L.
; APPLICANT: Pal, Ranajit
; APPLICANT: Gallo, Robert C.
; APPLICANT: Markham, Phillip D.
; APPLICANT: Garzino-Demo, Alfredo
; TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for
; FILE REFERENCE: 00784 SRP
; CURRENT APPLICATION NUMBER: US/10/341,931
; CURRENT FILING DATE: 2003-01-14
; PRIOR APPLICATION NUMBER: 08/931,764
; PRIOR FILING DATE: 1997-09-16
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 69
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-341-931-2

Query Match	95.5%	Score 362;	DB 12;	Length 69;
Best Local Similarity	94.2%	Pred. No. 1.3e+40;		
Matches	65;	Conservative	3;	Mismatches 1; Indels 0; Gaps 0;
QY	1	GPYANNMEDSVCCRDYVRYRLPLRVYKVFYTSDCSPRGVLLTFRDKICADPRVPWV	60	
Db	1	GPYANNMEDSVCCRDYVRYRLPLRVYKVFYTSDCSPRGVLLTFRDKICADPRVPWV	60	
QY	61	KMLNKLQS	69	
Db	61	KMLNKLQS	69	

RESULT 2
PCT-US02-35606-109
; Sequence 109, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.

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; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 99
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-109

Query Match          95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KWLKLSQ 69
Db 85 KWLKLSQ 93

RESULT 3
PCT-US02-35606-146
; Sequence 146, Application PC/TUS0235606
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: 41 Human Secreted Proteins
; FILE REFERENCE: PS740PCT
; CURRENT APPLICATION NUMBER: PCT/US02/35606
; CURRENT FILING DATE: 2002-11-06
; PRIOR APPLICATION NUMBER: 60/331,046
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 160
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 146
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-35606-146

Query Match          95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KWLKLSQ 69
Db 85 KWLKLSQ 93

RESULT 4
PCT-US02-40891-473
; Sequence 473, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
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; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 473
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-473

Query Match          95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANMEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVKHYFTSDSCPRPGVLLTFRDKKEICADPRVPWV 84

Qy 61 KWLKLSQ 69
Db 85 KWLKLSQ 93

RESULT 5
PCT-US02-40891-549
; Sequence 549, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 549
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
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; Remaining Prior Application data removed - See File Wrapper or PALM.

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; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 640
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640

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Query Match 95.5%; Score 362; DB 2; Length 93;
Best Local Similarity 94.2%; Pred. NO. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Db

Qy 61 KMILNKLSQ 69

85 KMTLNL.SQ 93

RESULT 9

PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Albumin Fusion Proteins

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; FILE REFERENCE: PF564PCT
; FILE REFERENCE: PF564PCT
; CURRENT APPLICATION NUMBER: PCT/US02/40891

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; CURRENT APPLICATION NUMBER: 60/341 811
 ; CURRENT FILING DATE: 2002-12-23
 ; CURRENT PUBLICATION NUMBER: 60/341 811

; PRIOR APPLICATION NUMBER: 80/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 80/341,811

; PRIOR APPLICATION NUMBER: 60/360,000
 ;
 ; PRIOR FILING DATE: 2002-02-28

; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10

; PRIORITY APPLICATION NUMBER: 60/398,008
; PRIORITY FILING DATE: 2002-07-24

; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-00-18

; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984

; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611

; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246

; PRIOR APPLICATION NUMBER: 60/420,240
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/422,602

; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ;

;; PRIOR APPLICATION NUMBER: 6
;; PRIOR FILING DATE: 2002-01-

; Remaining Prior Applications
: NUMBER OF SEQ ID NOS: 2; NUMBER OF SEQ IN
; SOFTWARE: Patent
; SEQ ID NO 641

Query Match 95.58; Score 362; DB 2; Length 93;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps

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Qy 1 GPYGANNEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGWLLTFRDKEICADPRVWV 60
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DD 23 GFI GANMEDSVC

QY 61 KMILNLSQ 69
| | | | | | | |

RESULT 10
US-10-314-410-2
; Sequence 2, Application US/10314410
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gearing, David P.

; APPLICANT:
; TITLE OF INV

DATE	DESCRIPTION	AMOUNT	TITLE OF INVENTOR
1900
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; FILE REFERENCE: 07334-324001
; CURRENT APPLICATION NUMBER: US/10/314,410

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; CURRENT FILING DATE: 2002-12-06
 ; PRIOR APPLICATION NUMBER: US/09/811,088

;; PRIOR FILING DATE: 2001
; PRIOR APPLICATION NUMBER: 2000

;; PRIOR FILING DATE: 2000-
;; PRIOR APPLICATION NUMBER:

PRTR
PRTR
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: PRIOR FILING DATE: 1997-04-16
: PRIOR APPLICATION NUMBER: US 08/843,616
:
: PRIOR FILING DATE: 1997-04-16
: PRIOR APPLICATION NUMBER: US 09/354,818
:
: PRIOR FILING DATE: 1999-07-16
: PRIOR APPLICATION NUMBER: US 08/938,333
:

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; PRIOR FILING
 ; PRIOR FILING
 ; NUMBER OF SE

; NUMBER OF SE
; SOFTWARE: Fa
: SEQ ID NO 2

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; LENGTH: 93
; TYPE: PRT
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; ORGANISM: H
US-10-314-410-2

Query Match
Best Local Sth

Best Local SI
Matches 65;

Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 84
|||||

Qy 61 KMILNLSQ 69
|||||

Db 85 KMILNLSQ 93

RESULT 12

US-10-445-790-2

; Sequence 2, Application US/10445790

; GENERAL INFORMATION:

; APPLICANT: DeVico, Anthony L.

; TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination

; FILE REFERENCE: 4115-109 CIP DIV

; CURRENT APPLICATION NUMBER: US/10/445,790

; CURRENT FILING DATE: 2003-05-27

; PRIOR APPLICATION NUMBER: PCT/US98/26291

; PRIOR FILING DATE: 1998-12-11

; PRIOR APPLICATION NUMBER: US 09/591,992

; PRIOR FILING DATE: 2000-12-06

; PRIOR APPLICATION NUMBER: US 60/186,416

; PRIOR FILING DATE: 2000-03-02

; PRIOR APPLICATION NUMBER: US 60/069,281

; PRIOR FILING DATE: 1997-12-11

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: Patent in version 3.1

; SEQ ID NO 2

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-445-790-2

Query Match 95.5%; Score 362; DB 12; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 84
|||||

Qy 61 KMILNLSQ 69
|||||

Db 85 KMILNLSQ 93

RESULT 13

US-60-453-135-8659

; Sequence 8659, Application US/60453135

; GENERAL INFORMATION:

; APPLICANT: IAKOUBOVA, Olga

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF

; FILE REFERENCE: CL001456

; CURRENT APPLICATION NUMBER: US/60/453,135

; CURRENT FILING DATE: 2003-03-10

; NUMBER OF SEQ ID NOS: 82762

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 8659

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-60-453-135-8659

Query Match 95.5%; Score 362; DB 14; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 84
|||||

Qy 61 KMILNLSQ 69
|||||

Db 85 KMILNLSQ 93

RESULT 14

US-60-453-050-8659

; Sequence 8659, Application US/60453050

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele

; APPLICANT: LUKE, May

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH STENOSIS, METHODS OF DETECTION AND USES THEREOF

; FILE REFERENCE: CL001457

; CURRENT APPLICATION NUMBER: US/60/453,050

; CURRENT FILING DATE: 2003-03-10

; NUMBER OF SEQ ID NOS: 82762

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 8659

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-60-453-050-8659

Query Match 95.5%; Score 362; DB 14; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 84
|||||

Qy 61 KMILNLSQ 69
|||||

Db 85 KMILNLSQ 93

RESULT 15

US-60-455-444-4765

; Sequence 4765, Application US/60455444

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele

; APPLICANT: BEGOVICH, Ann

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF

; FILE REFERENCE: CL001455

; CURRENT APPLICATION NUMBER: US/60/455,444

; CURRENT FILING DATE: 2003-03-18

; NUMBER OF SEQ ID NOS: 50986

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 4765

; LENGTH: 93

; TYPE: PRT

; ORGANISM: Homo sapiens

US-60-455-444-4765

Query Match 95.5%; Score 362; DB 14; Length 93;
Best Local Similarity 94.2%; Pred. No. 1.9e-40;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 60
|||||
Db 25 GPGANNEDSVCCRDYVRYRLPLRVVKEYEYTTSDSCPRPGVLLTFRDKKEICADPRVPWV 84
|||||

Qy 61 KMILNLSQ 69
|||||

Db 85 KMILNLSQ 93

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us-09-509-165a-32.rapn

Page 6

Search completed: July 28, 2003, 04:18:50
Job time : 24.3529 secs

Result No.	Query			DB	ID	Description
	Score	Match	Length			
1	152	40.1	92	2	I52322	macrophage inflamm
2	148	39.1	91	1	A28815	monocyte chemoattr
3	146	38.5	91	1	A46539	monocyte chemoattr
4	142	37.5	92	2	A32393	macrophage inflamm
5	140	36.9	92	2	A30574	macrophage inflamm
6	133	35.1	93	2	B35673	LD78-beta protein
7	127.5	33.6	92	1	A31767	macrophage inflamm
8	126.5	33.4	92	2	C30552	macrophage inflamm
9	122	32.2	99	2	JC5295	monocyte chemotact
10	121	31.9	109	2	A54678	monocyte chemotact
11	120	31.7	120	2	I48147	monocyte chemoattr
12	115.5	30.5	92	2	I46730	immune activation
13	114	30.1	99	2	JC2417	monocyte chemoattr
14	112.5	29.7	148	1	S07723	immediate-early se
15	106	28.0	99	2	A60299	monocyte chemoattr
16	105.5	27.8	148	1	A30209	PDGF-Inducible JE
17	104	27.4	97	2	JC4912	eotaxin precursor
18	101	26.6	50	2	C60407	monocyte adherence
19	101	26.6	96	2	I48099	eotaxin precursor
20	100.5	26.5	99	1	A39296	monocyte chemoattr
21	100.5	26.5	99	2	JC2336	monocyte chemoattr
22	100	26.4	96	2	JC2478	eotaxin precursor
23	99.5	26.3	116	2	I49555	gene C10 protein -
24	95	25.1	114	1	ETHUL	lymphotactin precu
25	93.5	24.7	99	2	JC2136	monocyte chemoattr
26	91	24.0	96	2	A37236	I-309 protein prec
27	88.5	23.4	120	2	JE0177	lymphocyte and mon
28	86.5	22.8	92	2	S24236	TCA3 protein - mou
29	84.5	22.3	125	2	I46857	monocyte chemoattr

C; Keywords: chemotaxis; cytok

QY Z FIGANMEDSVCCNDIVKIKLPLRVVKEIFFYTSDSQPRPGVVDLTF RDKEICADPRVPVVK 61

A:Note: 26-Met, 30-Pro, and 39-Thr were also found
R:Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
J. Immunol. 146, 4031-4040, 1991
A:Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and conserv
A:Reference number: I56104; MUID: I51237116; PMID:2033269
A:Accession: I56104
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-92 <RES>
A:Cross-references: GB:M73061; NID:g199694; PIDN:AAA39707.1; PID:g199695
C:Comment: This protein is a monokine.
C:Genetics:
A:Introns: 23/3; 26/1; 63/2
C:Superfamily: macrophage inflammatory protein
C:Keywords: heparin binding
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein #status experimental <MAT>

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Query Match      37.5%; Score 142; DB 2; Length 92;
Best Local Similarity 40.9%; Pred. No. 4e-10;
Matches 27; Conservative 15; Mismatches 22; Indels 2; Gaps 2;
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Qy	2 PYGANNEDSVCCRDYVRYRLPLRWKEYFTVTSSCPRGVVLLTFRDKETCADPRVPWVK 61 : : : : : : : :
Db	25 PYCAD-TPTACCFYSYR-KIPRQFIVDYFFETSLSQCOPGVIFLTKNRNQICADSKETWVQ 82
Qy	62 MILNKL 67
Db	83 EYTDL 88

RESULT 5.
A30574
macrophage inflammatory protein 1-alpha precursor - human
N;Alternate names: LD78-alpha protein precursor; lymphocyte tumor promoter-induced protein
activation protein 1
C;Species: Homo sapiens (man)
C;Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000
C;Accession: A35673; A30574; A30412; A24198; A30908
R;Nakao, M.; Nomiyama, H.; Shimada, K.

Mol. Cell. Biol. 10, 3648-3658, 1990
 A:Title: Structures of human genes coding for cytokine Lb78 and their expression.
 A:Reference number: A35673; MUID:90287155; PMID:1694014
 A:Accession: A35673
 A:Molecule type: DNA
 A:Residues: 1-92 <NA>
 A:Cross-references: GB:D90144; NID:g219905; PIDN:BA41472.1; PID:g219906
 R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
 J. Immunol. 142, 1582-1590, 1989
 A:Title: Mitogenic activation of human T cells induces two closely related genes which s
 A:Reference number: A30574; MUID:89140347; PMID:2521882

A;Accession: A30574
A;Molecule type: mRNA
A;Residues: 1-92 <ZIP>
A;Cross-references: GB:M25315; NID:g602452; PIDN:AAA57255.1; PID:g602453
R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation
A;Reference number: A30412; MUID:91103879; PMID:22711120
A;Accession: A30412
A;Molecule type: mRNA
A;Residues: 1-92 <BLU>
A;Cross-references: GB:M23178; GB:M32337; NID:g182846; PIDN:AAA35858.1; PID:g182847
R;Obaru, K.; Fukuda, M.; Maeda, S.; Shinada, K.
J. Biochem. 99, 885-894, 1986
A;Title: A cDNA clone used to study mRNA inducible in human tonsillar lymphocytes by a tumor promoter
A;Reference number: A24198; MUID:86223879; PMID:3086300

A:Residues: 1-92 <OBA>
 A:Cross-references: GB:X03754; NID:g34298; PIDN:CAA27388.1; PID:g758089
 C:Genetics:

A:Gene: GDB:SCYA3
A:Cross-references: GDB:120368; OMIM:182283
A:Map position: 17q11-17q21
C:Superfamily: macrophage inflammatory protein
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-92/Product: macrophage inflammatory protein 1-alpha
F:33-57, 34-73/Disulfide bonds: #status predicted <MAT>
F:33-57, 34-73/Disulfide bonds: #status predicted

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Query Match      36.9%; Score 140; DB 2; Length 92;
Best Local Similarity 37.9%; Pred. No. 7.1e-10;
Matches 22; Conservative 13; Mismatches 23; Indels 0; Gaps 0;

Qy . 10  SVCCRDVYRRLRLPVVVKKEYFTYSDSCPRGCVLLTFRDEKEICADRPVPPVWMLNKL 67
      || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 31  TACCFSTYSROIPONFATDYFEFTSSOCCKGVTFLTKRSROVGCADPSEEWKQVYSDL 88

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RESULT 6
B35673
LD78-beta protein precursor - human
N:Alternate names: macrophage inflammatory protein homolog GOS19-2; small inducible c
C:Species: Homo sapiens (man)
C:Date: 28-Sep-1990 #sequence,revision 28-Sep-1990 #text_change 20-Jun-2000
C:Accession: B35673; B30412; S10157; B30908
R:Nakao, M.; Nomiya, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
A:Title: Structures of human genes coding for cytokine LD78 and their expression.
A:Reference number: A35673; MUID:90287155; PMID:1694014

A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-93 <NAK>
A:Cross-references: GB:D90145; NID:g219907; PIDN:BAA14173.1; PID:g219908
R:Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A:Title: Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation
A:Reference number: A30412; MUID:91103879; PMID:2271120
A:Accession: B30412
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-93 <BLG>
A:Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
R:Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Sie
Nucleic Acids Res. 18, 3261-3270, 1990
A:Title: Two inflammatory mediator cytokine genes are closely linked and variably exp
A:Reference number: S10157; MUID:90287702; PMID:1972563

A: Residues: 1-93 <IRV>
A: Cross-references: EMBL:X52149; NID:G34750; PIDN:CAA36397.1; PID:Q296666
C: Comment: This protein is a member of a "small inducible" or "activation specific" g
C: Genetics:
A: Gene: GDB:SCYA4
A: Cross-references: GDB:120369; OMIM:182284
A: Map position: 17q11-17q21
A: Introns: 26/1; 64/2
C: Superfamily: macrophage inflammatory protein
C: Keywords: cytokine
F: 1-22/Domain: signal sequence #status predicted <SIG>
F: 23-93/Product: ID78-beta protein #status predicted <MAT>

Query Match	35.18;	Score 133;	DB 2;	Length 93;
Best Local Similarity	36.28;	Pred. No. 5.1e-09;		
Matches	21;	Conservative	13;	Mismatches 24; Indels 0; Gaps 0;
Qy	10	SVCCRDYRVRLPLRVVKEYFYFTSDSCPRGEGVLLTFRDKEICADRPVWPKMLNKL	67	
		: : : : : : : : : : : : : : :		
Db	32	TACCFSTYSRQIPNFATDYFSESSQCKSVFLTKRGQVCADSEEWQKVYVDL	89	

RESULT 7
A31767

macrophage inflammatory protein 1-beta precursor [validated] - human
 N:Alternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene protein 2 (Act-2); T-cell activation protein gamma
 C:Species: Homo sapiens (man)
 C:Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
 C:Accession: JH0319; A40978; A31767; A37411; B30574; B45817; B30552
 R:Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequignol, Immunol. 27, 1091-1102, 1990
 A:Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
 A:Reference number: JH0319; MUID:91061800; PMID:2247088
 A:Accession: JH0319
 A:Status: translation not shown
 A:Molecule type: DNA
 A:Residues: 1-92 <BAI>
 A:Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
 A:Experimental source: natural killer cell, strain CD3-CD24, F5, J11E5
 R:Napolitano, M.; Modi, W.S.; Cevalero, S.J.; Gharra, J.R.; Seanez, H.N.; Leonard, W.J. J. Biol. Chem. 266, 17531-17536, 1991
 A:Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-1/tax responsiveness
 A:Reference number: A40978; MUID:91373378; PMID:1894635
 A:Accession: A40978
 A:Molecule type: DNA
 A:Residues: 1-14, 'S', 16-69, 'G', 71-92 <NAP>
 A:Cross-references: GB:M69201; NID:g178021
 A:Note: 15-Ala was also found
 R:Ripbes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J. Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
 A:Title: Identification, cloning, and characterization of an immune activation gene.
 A:Reference number: A31767; MUID:89071764; PMID:2462251
 A:Accession: A31767
 A:Molecule type: mRNA
 A:Residues: 1-92 <LIP>
 R:Chang, H.C.; Reinherz, E.L.
 Eur. J. Immunol. 19, 1045-1051, 1989
 A:Title: Isolation and characterization of a cDNA encoding a putative cytokine which is
 A:Reference number: A37411; MUID:89325421; PMID:2568930
 A:Accession: A37411
 A:Molecule type: mRNA
 A:Residues: 1-92 <CHA>
 A:Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
 R:Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U. J. Immunol. 142, 1582-1590, 1989
 A:Title: Mitogenic activation of human T cells induces two closely related genes which
 A:Reference number: A30574; MUID:89140347; PMID:2521882
 A:Accession: B30574
 A:Molecule type: mRNA
 A:Residues: 1-19, 'L', 21-92 <ZIP>
 A:Cross-references: GB:M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
 R:Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S. J. Immunol. 143, 2907-2916, 1989
 A:Title: A novel polypeptide secreted by activated human T lymphocytes.
 A:Reference number: A45817; MUID:90038522; PMID:2809212
 A:Accession: B45817
 A:Molecule type: mRNA
 A:Residues: 7-55, 'I', 57-79, 'T', 81-92 <MIL>
 A:Cross-references: GB:M57503; NID:g339726; PIDN:AAA36752.1; PID:g339727
 R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. 142, 679-687, 1989
 A:Title: A family of small inducible proteins secreted by leukocytes are members of a new
 A:Reference number: A30552; MUID:89093958; PMID:2521353
 A:Accession: D30552
 A:Molecule type: mRNA
 A:Residues: 1-39, 'REASS', 46-92 <BRO>
 A:Cross-references: GB:M23502; NID:g533212; PIDN:AAA36656.1; PID:g533213
 R:Clare, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M. submitted to the Brookhaven Protein Data Bank, January 1994
 A:Reference number: A52206; PDB:1HUM
 A:Contents: annotation; conformation and disulfide bond assignments by (1)H-NMR, residue
 C:Comment: This protein is secreted by activated lymphocytes and monocytes. It is bound
 C:Genetics:
 A:Gene: GDB:LAG1

A:Cross-references: GDB:127451; OMIM:153335
 A:Map position: 17q21-17q21
 A:Introns: 26/1; 64/2
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: chemotaxis; cytokine; inflammation
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
 F:34-58,35-74/Disulfide bonds: #status experimental
 Query Match 33.6%; Score 127.5; DB 1; Length 92;
 Best Local Similarity 40.0%; Pred. No. 2.4e-08;
 Matches 24; Conservative 10; Mismatches 25; Indels 1; Gaps 1;
 QY 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADPRVPVWK 61
 DB 25 PMGSD-PPTACCFSTARKLPNFVVDYETSSLSQPAVVPQTRKQVCADPSWVQ 83
 RESULT 8
 C30552
 macrophage inflammatory protein 1-beta precursor - mouse
 N:Alternate names: H400; SIS gamma; T-cell activation protein gamma
 C:Species: Mus musculus (house mouse)
 C:Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
 C:Accession: C30552; JLO088; PS0304; S22042
 R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. 142, 679-687, 1989
 A:Title: A family of small inducible proteins secreted by leukocytes are members of a
 A:Reference number: A30552; MUID:89093958; PMID:2521353
 A:Accession: C30552
 A:Molecule type: mRNA
 A:Residues: 1-92 <BRO>
 A:Cross-references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245
 R:Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D. J. Exp. Med. 168, 2251-2259, 1988
 A:Title: Resolution of the two components of macrophage inflammatory protein 1, and
 A:Reference number: JLO088; MUID:89067830; PMID:3058856
 A:Accession: JLO088
 A:Molecule type: mRNA
 A:Residues: 1-92 <SHE>
 A:Cross-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697
 A:Accession: PS0304
 A:Molecule type: protein
 A:Residues: 24-33, 'XX', 36, 'X', 38 <SH2>
 R:Daubersies, P.; Lepretre, F.; Baillieu, B.; Grove, M.; Pragnell, I.; Plumb, M. submitted to the EMBL Data Library, October 1991
 A:Description: Sequence of the murine macrophage inflammatory protein 1b gene.
 A:Reference number: S22042
 A:Accession: S22042
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-92 <DAU>
 A:Cross-references: EMBL:X62502; NID:g53126; PIDN:CAA44364.1; PID:g53127
 C:Comment: This protein is a monokine.
 C:Genetics:
 A:Introns: 26/1; 64/2
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: glycoprotein
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
 F:76/Binding site: carbohydrate (Asn) #status predicted
 Query Match 33.4%; Score 126.5; DB 2; Length 92;
 Best Local Similarity 39.4%; Pred. No. 3.1e-08;
 Matches 26; Conservative 11; Mismatches 28; Indels 1; Gaps 1;
 QY 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADPRVPVWK 61
 DB 25 PMGSDPPTS-CFSTYTSRQLHRSFVMDYETSSLSKPAVVPFLTRGRQICANSEPWT 83
 QY 62 MTLNKL 67
 ::

Matches	22;	Conservative	15;	Mismatches	28;	Indels	1;	Gaps	1;
Qy	2	PYGANMEDSVCCRDYVYRYRLRVKVKYFYTSQCPRGVVLTLFRDKETACADRPVPMVK	61						
Db	25	PMGSD-PPTACCFSTYLRKLPRHFVIDYFETTSILCSQPAVVFTKKGRQVCANPSESVMQ	83						
Qy	62	MILNKL	67						
Db	84	EYVDDL	89						

RESULT 13

monocyte chemoattractant protein-2 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
C:Accession: JC2417
R:Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 205, 148-153, 1994
A:Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis
A:Reference number: JC2417; MUID: I95091716; PMID:7999015
A:Accession: JC2417
A:Molecule type: mRNA
A:Residues: 1-99 <HOS>
A:Cross-references: GB:248480; NID:G683718; PIDN:CAA88371.1; PID:G683719
A:Experimental source: corpus luteum
C:Superfamily: macrophage inflammatory protein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>


Query Match	30.1%	Score 114:	DB 2:	Length 99:
Best Local Similarity	35.8%	Pred. No. 1.1e-06:		
Matches 24:	Conservative 12:	Mismatches 25:	Indels 6:	Gaps 2:
QY	9	DSV-----CCRDVRYRLPVURVKEYF-YTSDSCPREGVYVLLTFRDKEICADPRVPWVKM	62	
Db	26	DSVSIPTCCFGLNVGNQIPKPKLESTRINSCQPEAVIFKFKADKEVCADPOCKWVN	85	

RESULT 14

S07723
 Immediate-early serum-responsive protein JE precursor - rat
 N:Alternate names: monocyte chemoattractant protein-1
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
 C:Accession: S07723; JN0128
 R:Flimmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
 Nucleic Acids Res. 18, 23-34, 1990
 A:Title: Analysis of the rat JE gene promoter identifies an AP-1 binding site essential
 A:Reference number: S07723; MUID:90174947; PMID:2106664
 A:Accession: S07723
 A:Molecule type: DNA
 A:Residues: 1-148 <TIM>
 A:Cross-references: EMBL:X17053; NID:g55530; PIDN:CAA34901.1; PID:g55531
 R:Yoshimura, T.; Takeya, M.; Takahashi, K.
 Biochem. Biophys. Res. Commun. 174, 504-509, 1991
 A:Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its exp
 A:Reference number: JN0128; MUID:91128376; PMID:1704226
 A:Accession: JN0128
 A:Molecule type: mRNA
 A:Residues: 1-148 <YOS>
 A:Cross-references: GB:M57441; NID:g205333; PIDN:AAA63496.1; PID:g205334
 A:Experimental source: spleen cells
 A:Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue 6
 C:Genetics:
 A:Introns: 26/1; 65/2
 C:Superfamily: macrophage inflammatory protein
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-148/Product: Immediate-early serum-responsive protein JE #status predicted <MAT>

Query Match	29.7%	Score 112.5	DB 1	Length 148
Best Local Similarity	37.3%	Pred. No. 2.5e-06		
Matches	22	Conservative 10	Mismatches 26	Indels 1
Gaps	1			
Qy	12	CCRDYVRYRLPLRVVKEY-FYTSDCSPRGVLLLTFRDKEICADRPVPVKVILNKLSQ	69	
Db	34	CCYSFTGKMTPLMSLRNKRITSSRCCKEAAVYFVTKLKEICADPNKKEWQVYRKLDQ	92	

RESULT 15

A60299
monocyte chemotactant protein 1 precursor - human
N:Alternate names: GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1;
N:Contains: glioma-derived chemotactic factor 2 (GDCF-2)
C:Species: Homo sapiens (man)
C:Date: 20-Feb-1993 #sequence_revision 10-Feb-1993 #text_change 16-Jul-1999
C:Accession: A35474 A33476: S03339; I51841; A60299; A32300; A34561; I57488
R:Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.;
Biochem. Biophys. Res. Commun. 169, 346-351, 1990
A:Title: Structure of human monocyte chemotactic protein gene and its regulation by T
A:Reference number: A35474; MUID:90290466; PMID:2357211
A:Accession: A35474
A:Molecule type: DNA
A:Residues: 1-99 <SHY>
A:Cross-references: GB:M37719; NID:gl87447; PIDN:AAA18102.1; PID:g487124
R:Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989
A:Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A:Reference number: A33476; MUID:90097880; PMID:2513477
A:Accession: A33476
A:Molecule type: mRNA
A:Residues: 1-99 <ROL>
A:Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g18870; PIDN:AAA36330.1; 
R:Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. 244, 487-493, 1989
A:Title: Human monocyte chemotactant protein-1 (MCP-1). Full-length cDNA cloning

A:Reference number: S03339; MUID:89153605; PMID:2465924
A:Accession: S03339
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <YOS>
A:Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
A:Experimental source: glioma cell line U-105MG
R:Ioshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A:Title: Human monocyte chemoattractant protein-1 (MCP-1).
A:Reference number: I51841; MUID:92095166; PMID:1661560
A:Accession: I51841
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-99 <YOZ>
A:Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R:Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.
Int. J. Cancer 45, 795-797, 1990
A:Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactin-1/MCAF).A:Reference number: A60299; MUID:90216082; PMID:2182547
A:Accession: A60299
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <BOT>
R:Rifutani, Y.; Nomura, H.; Nataka, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, C.
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A:Title: Cloning and sequencing of the cDNA for human monocyte chemoattractant and activation factor-1 (MCAF).A:Reference number: A32300; MUID:89165862; PMID:2923622
A:Accession: A32300
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-99 <FUR>
A:Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163
R:Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, D.

Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
 A:Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative me
 A:Reference number: A32396; MUID:89184525; PMID:2648385
 A:Accession: A32396
 A:Molecule type: protein
 A:Residues: 'X', 25-99 <ROB>
 R:Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
 Biochem. Biophys. Res. Commun. 167, 904-909, 1990
 A:Title: Identification of the monocyte chemotactic protein from human osteosarcoma cell
 A:Reference number: A34561; MUID:90211336; PMID:2322286
 A:Accession: A34561
 A:Molecule type: protein
 A:Residues: 29-33, 'XX', 36-52; 82-92 <DEC>
 R:Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
 Mol. Cell. Biochem. 126, 61-68, 1993
 A:Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular endoth
 A:Reference number: 157488; MUID:94150478; PMID:8107690
 A:Accession: 157488
 A>Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-99 <LIY>
 A:Cross-references: GB:S69738; NID:g545464; PIDN:AAB29926.1; PID:g545465
 R:Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
 Chinese J. Microbiol. Immunol. 14, 29-32, 1994
 A:Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MC
 A:Reference number: JC1096
 A:Accession: JC1096
 A:Molecule type: mRNA
 A:Residues: 24-28, 'Q', 30-99 <YEO>
 C:Genetics:
 A:Gene: GDB:SCYA2
 A:Cross-references: GDB:125279; OMIM:158105
 A:Map position: 17q11.2-17q12
 C:Superfamily: macrophage inflammatory protein
 C:Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>
 F:29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MA
 F:24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experimen
 F:37/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 28.0%; Score 106; DB 2; Length 99;

Best Local Similarity 29.7%; Pred. No. 1e-05;

Matches 22; Conservative 16; Mismatches 30; Indels 6; Gaps 2;

Qy 2 PYGANMEDSV-----CCRDYVYRPLPLRVVKEY-FYTSDCPRPGVVLTPRDKKEICADP 55

Db 19 PQGLAQPDAINAPVTCCYNFTNRKISVORLASRYRITSSCKPEAVIFKTIIVAKEICADP 78

Qy 56 RVPWVKMILNKLISQ 69

Db 79 KQKWQDSMDHLDK 92

Search completed: July 28, 2003, 04:15:51
 Job time : 6.81303 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:03 ; Search time 3.62395 Seconds
(without alignments)
789.709 Million cell updates/sec

Title: US-09-509-165A-32

Perfect score: 379

Sequence: 1 GPYCANMEDSVCCRDYVRYR.....EICADPRVPWVKMLNLSQ 69

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	362	95.5	93	1 SY22_HUMAN	O00626 homo sapien
2	264	69.7	92	1 SY22_MOUSE	O88430 mus musculus
3	153	40.4	89	1 SY18_HUMAN	P55774 h small ind
4	152	40.1	92	1 SY03_RAT	P50229 rattus norv
5	148	39.1	91	1 SY05_HUMAN	P13501 homo sapien
6	146	38.5	91	1 SY05_MOUSE	P30882 mus musculus
7	146	38.5	92	1 SY05_RAT	P50231 rattus norv
8	142	37.5	92	1 SY03_MOUSE	P10855 mus musculus
9	141.5	37.3	90	1 SY04_CHICK	Q30826 gallus gall
10	140	36.9	91	1 SY05_CAVPO	P97272 cavia porce
11	140	36.9	92	1 SY03_HUMAN	P10147 homo sapien
12	135.5	35.8	104	1 SY12_MOUSE	Q82401 mus musculus
13	135	35.6	91	1 SY05_BOVIN	O97919 bos taurus
14	134	35.4	113	1 SY15_HUMAN	Q16663 homo sapien
15	133	35.1	93	1 SY3L_HUMAN	P16619 homo sapien
16	132.5	35.0	92	1 SY04_RAT	P50230 rattus norv
17	130	34.3	93	1 SY14_HUMAN	Q16627 homo sapien
18	127.5	33.6	92	1 SY04_HUMAN	P12336 h small ind
19	126.5	33.4	92	1 SY04_MOUSE	P14097 mus musculus
20	124	32.7	94	1 VMI2_KSHV	Q88157 kaposi's sa
21	122	32.2	99	1 SY08_HUMAN	P80075 homo sapien
22	121.5	32.1	70	1 REG1_BOVIN	P82943 bos taurus
23	121	31.9	99	1 SY07_HUMAN	P80098 homo sapien
24	120	31.7	120	1 SY02_CAVPO	Q88782 cavia porce
25	116.5	30.7	98	1 SY13_HUMAN	Q99616 homo sapien
26	115.5	30.5	92	1 SY04_RABIT	P46632 oryctolagus
27	114	30.1	99	1 SY08_PIG	P49873 sus scrofa
28	112.5	29.7	148	1 SY02_RAT	P14844 rattus norv
29	112	29.6	94	1 SY17_HUMAN	Q92583 homo sapien
30	112	29.6	94	1 SY16_HUMAN	Q97258 homo sapien
31	111.5	29.4	108	1 SY19_MOUSE	O70460 mus musculus
32	110.5	29.2	98	1 SY19_HUMAN	Q99731 homo sapien
33	109.5	28.9	119	1 SY24_MOUSE	Q9jkc0 mus musculus

ALIGNMENTS

RESULT 1

ID	SY22_HUMAN	STANDARD;	PRT;	93 AA.
AC	O00626;			
DT	15-JUL-1999 (Rel. 38, Created)			
DT	15-JUL-1999 (Rel. 38, Last sequence update)			
DT	15-JUN-2002 (Rel. 41, Last annotation update)			
DE	Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1).			
DE	STCP-1).			
GN	SCYA22 OR MDC OR A-152E5.1.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A., AND SEQUENCE OF 25-35.			
RC	TISSUE=Macrophage;			
RX	MEDLINE=97296313; PubMed=9151897;			
RA	Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P.,			
RA	Levitin D., Mantovani A., Gray P.W.;			
RT	"Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells.";			
RT	J. Exp. Med. 185:1595-1604(1997).			
RL	[2]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Macrophage;			
RX	MEDLINE=97460118; PubMed=9312138;			
RA	Chang M.-S., McNinch J., Elias C. III, Manthey C.L., Grosshans D.,			
RA	Meng T., Boone T., Andrew D.P.;			
RT	"Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes.";			
RT	J. Biol. Chem. 272:25229-25237(1997).			
RL	[3]			
RN	SEQUENCE FROM N.A.			
RP	MEDLINE=99425270; PubMed=10493829;			
RX	Loftus B.J., Kim U.-J., Sneddon V.P., Kalush F., Brandon R.,			
RA	Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,			
RA	Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S.,			
RA	Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;			
RT	"Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q.";			
RT	Genomics 60:295-308(1999).			
RL	[4]			
RN	SEQUENCE FROM N.A.			
RP	TISSUE=Pancreas, and Spleen;			
RX	Strausberg R.;			
RA	Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.			
RL	[5]			
RN	RECEPTOR INTERACTION.			
RP	MEDLINE=98104168; PubMed=9430724;			
RX	Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,			
RA	Yoshie O., Gray P.W.;			
RT	"Macrophage-derived chemokine is a functional ligand for the CC			

Q9288 sus scrofa
Q09141 bos taurus
P55773 homo sapien
P13500 homo sapien
Q8myn4 macaca fasc
P10148 mus musculus
P51671 homo sapien
O00175 homo sapien
P80325 cavia porce
P28291 bos taurus
Q92121 mus musculus
P27784 mus musculus

```

RT chemokine receptor 4.;
RL J. Biol. Chem. 273:1764-1768(1998).
CC -|- FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
CC T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
CC T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
CC ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CC CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
CC ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
CC BINDS TO CCR4.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
CC MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
CC NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
CC MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
CC EXPRESSION IN SMALL INTESTINE.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC -----
DR EMBL: U83171; AAB58360.1; -
DR EMBL: U83239; AAB53372.1; -
DR EMBL: AC004382; AAC24306.1; -
DR EMBL: BC027952; AAH27952.1; -
DR HSP: G98157; ICM9.
DR Genew: HGNC:10621; SCYA22.
DR MIM: 602957; -
DR InterPro: IPR000827; CC-chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal.
FT CHAIN 1 24
FT DISULFID 25 93 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 93 AA; 10580 MW; 631FBE9CC083F787 CRC64;

Query Match 95.5%; Score 362; DB 1; Length 93;
Best Local Similarity 94.2%; Pred. No. 3.2e-38;
Matches 65; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEFYTSDSCPRPGVYLLTFRDKICADPRVPWV 60
Db 25 GPGANMEDSVCCRDYVRYRLPLRVVKEFYTSDSCPRPGVYLLTFRDKICADPRVPWV 84

QY 61 KMLNKLQ 69
Db 85 KMLNKLQ 93

RESULT 2
SY22_MOUSE
ID SY22_MOUSE STANDARD; PRT; 92 AA.
AC O88430;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
DE (Activated B and dendritic cell-derived).
DE SCYA22 OR ABCD1.
GN Mus musculus (Mouse).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OC NCBI_TaxID=10090;
OX

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RN SEQUENCE FROM N.A.
RP TISSUE=Liver;
RX MEDLINE=98353531; PubMed=9687523;
RA Schaniel C., Pardali E., Sallusto F., Speletas M., Ruedl C.,
RA Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
RA Sideras P.;
RT "Activated murine B lymphocytes and dendritic cells produce a novel
RT CC chemokine which acts selectively on activated T cells.";
RL J. Exp. Med. 188:451-463(1998).
CC -|- FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN
CC IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B
CC LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES
CC AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH
CC NODE, AND UNSTIMULATED SPLENIC CELLS.
CC -|- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: AF052505; AAC40200.1; -
DR HSP: G98157; ICM9.
DR MGD: MGI:1306779; Scya22.
DR InterPro: IPR000827; CC-chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
DR Cytokine; Chemotaxis; Signal; Inflammatory response.
FT CHAIN 1 24
FT DISULFID 25 92 SMALL INDUCIBLE CYTOKINE A22.
FT DISULFID 36 60 BY SIMILARITY.
FT DISULFID 37 76 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10302 MW; 39859881CDAE07CA CRC64;

Query Match 69.7%; Score 264; DB 1; Length 92;
Best Local Similarity 64.7%; Pred. No. 4.8e-26;
Matches 44; Conservative 16; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEFYTSDSCPRPGVYLLTFRDKICADPRVPWV 60
Db 25 GPGANVEDSICCQDIYRPLPSRLVKEFFWTSKRCRPGVYLLTVKRDICADPRVPWV 84

QY 61 KMLNKLQ 68
Db 85 KMLNKLQ 92

RESULT 3
SY18_HUMAN
ID SY18_HUMAN STANDARD; PRT; 89 AA.
AC P55774;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A18 precursor (CCL18) (Macrophage
DE inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
DE chemokine) (CC chemokine PARC) (Alternative macrophage activation-
DE associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
DE CK1).
GN SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCC1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
OX

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DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
DR Cytokine: Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 23 POTENTIAL.
FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
FT CONFLICT 19 19 T -> A (IN REF. 2).
FT CONFLICT 41 41 A -> E (IN REF. 1).
FT CONFLICT 41 41 A -> E (IN REF. 1).
SQ SEQUENCE 91 AA; 10071 MW; 5DFD66F4684FE1C8 CRC64;

Query Match 38.5%; Score 146; DB 1; Length 91;
Best Local Similarity 42.4%; Pred. No. 2.2e-11;
Matches 28; Conservative 12; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGANNEDSVCCRDYVRPLRVVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 61
DB 25 PYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 82
QY 62 MILNKL 67
DB 83 EYINYL 88

RESULT 7
SY05.RAT STANDARD; PRT; 92 AA.
AC P50231;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
DE protein) (SIS-delta).
GN SCYA5.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Long Evans; TISSUE=Lung;
RA Jones M.L., Shanley T.P., Ward P.A.;
RL Submitted (FEB-1994) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CC CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
CC BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U06436; AA96499.1; -.
DR HSP; P13501; IRTN.
DR InterPro: IPR000827; CC_chemkine_sml.
DR InterPro: IPR001811; Chemokine_IL8.
DR Pfam: PF00048; IL8; 1.
DR SMART: SM00199; SCY; 1.
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
DR Cytokine: Chemotaxis; T-cell; Signal; Inflammatory response.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 92 SMALL INDUCIBLE CYTOKINE A5.
FT DISULFID 34 58 BY SIMILARITY.
FT DISULFID 35 74 BY SIMILARITY.
SQ SEQUENCE 92 AA; 10170 MW; B4FEC2B4208ABC6 CRC64;

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Query Match 38.5%; Score 146; DB 1; Length 92;
Best Local Similarity 42.4%; Pred. No. 2.3e-11;
Matches 28; Conservative 12; Mismatches 24; Indels 2; Gaps 1;

QY 2 PYGANNEDSVCCRDYVRPLRVVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 61
DB 26 PYGS--DTTPCCFAYLSLALPRAHVKEYFYTSKCSNLA VVFTRRNQVCANPEKKWQ 83
QY 62 MILNKL 67
DB 84 EYINYL 89

RESULT 8
SY03.MOUSE STANDARD; PRT; 92 AA.
AC P10855; P14096;
DT 01-JUL-1989 (Rel. 11, Created)
DT 01-APR-1990 (Rel. 14, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
DE protein 1-alpha) (MIP-1-alpha) (Ty-5) (SIS-alpha) (Heparin-binding
DE chemotaxis protein) (L2G25B).
GN SCYA3 OR MIP1A.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=88258380; PubMed=3290382;
RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C.,
RA Gallegos C., Coit D., Merryweather J., Cerami A.;
RT "Cloning and characterization of a cDNA for murine macrophage
RT inflammatory protein (MIP), a novel monokine with inflammatory and
RT chemokinetic properties."
RL J. Exp. Med. 167:1939-1944(1988).
RN [2]
RP REVISIONS.
RA Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermesen K., Luedke C.,
RA Gallegos C., Coit D., Merryweather J., Cerami A.;
RL J. Exp. Med. 170:2189-2189(1989).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=89093958; PubMed=2521353;
RA Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
RT "A family of small inducible proteins secreted by leukocytes are
RT members of a new superfamily that includes leukocyte and
RT fibroblast-derived inflammatory agents, growth factors, and
RT indicators of various activation processes."
RL J. Immunol. 142:679-687(1989).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=DBA/2J;
RX MEDLINE=91016858; PubMed=2216738;
RA Grove M., Lowe S., Graham G., Pragnell I., Plumb M.;
RT "Sequence of the murine haemopoietic stem cell inhibitor/macrophage
RT inflammatory protein 1 alpha gene."
RL Nucleic Acids Res. 18:5561-5561(1990).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=89184547; PubMed=2784565;
RA Kwon B.S., Weissman S.M.;
RT "cDNA sequences of two inducible T-cell genes."
RL Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=91237116; PubMed=2033269;
RA Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
RA Cerami A.;
RT "Genomic structure of murine macrophage inflammatory protein-1 alpha
RT and conservation of potential regulatory sequences with a human

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homolog, LD78." ;
J. Immunol. 146:4031-4040(1991).
[7]
SEQUENCE FROM N.A.
SPRAIN=BALB/CJ, DRA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE=Spleen;
Ma R.Z., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
[8]
SEQUENCE OF 24-42.
MEDLINE=88154745; Pubmed=3279154;
Wolpe S.D., Davatellis G., Sherry B., Beutler B., Hesse D.G.,
Ra Nguyen H.T., Moldawer L.L., Nathan C.F., Lowry S.F., Cerami A.;
"Macrophages secrete a novel heparin-binding protein with
inflammatory and neutrophil chemokinetic properties." ;
J. Exp. Med. 167:570-581(1988).
CC CC -1- FUNCTION: MONOKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
CC CC BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
NEUTROPHILS.
CC CC -1- SUBCELLULAR LOCATION: Secreted.
CC CC -1- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
CC CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
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CC EMBL; M23447; AAA40146.1; -
CC EMBL; X12531; CAA31047.1; -
CC EMBL; X53372; CAA37452.1; -
CC EMBL; J04491; AAA40304.1; -
CC EMBL; M73061; AAA39707.1; -
CC EMBL; AF065939; AAC17506.1; -
CC EMBL; AF065940; AAC17507.1; -
CC EMBL; AF065941; AAC17508.1; -
CC EMBL; AF065942; AAC17509.1; -
CC EMBL; AF065943; AAC17510.1; -
CC PIR; A27596; A27596.
CC PIR; A30552; A30552.
CC PIR; A32393; A32393.
CC PIR; S04533; S04533.
CC PIR; S11685; S11685.
CC HSSP; P13236; 1HUM.
CC MGD; MGI:98260; Scya3.
CC InterPro; IPR000827; CC_chemkine_sml.
CC InterPro; IPR001811; Chemokine_IL8.
CC Pfam; PF00048; IL8; 1.
CC SMART; SM00199; SCV; 1.
CC PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CC Cytokine; Chemotaxis; Inflammatory response; Signal.
CC SIGNAL 1 23
CC CHAIN 24 92 SMALL INDUCIBLE CYTOKINE A3.
CC DISULFID 34 57 BY SIMILARITY.
CC DISULFID 35 73 BY SIMILARITY.
CC CONFLICT 22 22 F -> L (IN REF. 3).
CC CONFLICT 62 62 V -> A (IN REF. 3).
CC SEQUENCE 92 AA; 10345 MW; 8BFF2DE7C6DED38 CRC64;
Query Match 37.5%; Score 142; DB 1; Length 92;
Best Local Similarity 40.9%; Pred. No. 7.1e-11;
Matches 27; Conservative 15; Mismatches 22; Indels 2; Gaps 2;
QY 2 PYGMNEDSVCCRDYVRYRLPLRVKVEYFTSDSCPRGVLLITFRDKETCADPRVPVWK 61
Db PYGAD-TPTACCFSSYR-KIPROFIVDYETSLCSQPGVIFLTKNRQICADSKETWQ 82
QY 62 MILNKL 67
: 1

```


1 delta) (Leukotactin-1) (LKN-1) (Mrp-2b).
 GN SCYA15 OR MIP5 OR NCC3.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A., AND CHARACTERIZATION.
 RC TISSUE=Liver;
 RX MEDLINE=98263352; PubMed=9600961;
 RA Pardoll A., Forssmann U., Zucht H.-D., Loetscher P.,
 RA Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
 RT "HCC-2, a human chemokine: gene structure, expression pattern, and
 RT biological activity."; *Proc. Natl. Acad. Sci. U.S.A.* 95:6308-6313(1998).
 RL [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Spleen;
 RX MEDLINE=98287677; PubMed=9624581;
 RA Wang W., Bacon K.B., Oldham E.R., Schall T.J.;
 RT "Molecular cloning and functional characterization of human MIP-1
 RT delta, a new C-C chemokine related to mouse CCF-18 and C10."; *J.
 RL J. Clin. Immunol.* 18:214-222(1998).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99228475; PubMed=10213461;
 RA Nomiya H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
 RT "Organization of the chemokine gene cluster on human chromosome
 RT 17q11.2 containing the genes for CC chemokine, MIP-1, HCC-2, LEC, and
 RT RANTES."; *J. Interferon Cytokine Res.* 19:227-234(1999).
 RL [4]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98208236; PubMed=9548457;
 RA Yoon B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E.,
 RA Murphy P.M., Locati M., Pease J.E., Kim K.K., Antol K., Kwon B.S.;
 RT "Molecular cloning of leukotactin-1: a novel human beta-chemokine, a
 RT chemoattractant for neutrophils, monocytes, and lymphocytes, and a
 RT potent agonist at CC chemokine receptors 1 and 3."; *J. Immunol.* 159:5201-5205(1997).
 RN [5]
 RP SEQUENCE FROM N.A.
 RA Kwon B.S., Yoon B.-S.;
 RT "Isolation and characterization of a human chemokine cDNA, hmpr-2b.";
 RL Submitted (MAY-1996) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE OF 12-113 FROM N.A.
 RA Coulin F., Power C.A., Alouani S., Peitsch M.C., Schroeder J.-M.,
 RA Moshizuki M., Clark-Lewis I., Wells T.N.C.;
 RL Submitted (JAN-1997) to the SWISS-PROT data bank.
 RN [7]
 RP DISCUSSION OF SEQUENCE.
 RX MEDLINE=97275308; PubMed=9129202;
 RA Wells T.N.C., Peitsch M.C.;
 RT "The chemokine information source: identification and
 RT characterization of novel chemokines using the WorldWideWeb and
 RT expressed sequence tag databases."; *J. Leukoc. Biol.* 61:545-550(1997).
 RN [8]
 RP TISSUE SPECIFICITY.
 RX MEDLINE=98226667; PubMed=9558365;
 RA Yoon B.-S., Zhang S.M., Broxmeyer H.E., Cooper S., Antol K.,
 RA Fraser M. Jr., Kwon B.S.;
 RT "Characterization of Ckbeta8 and Ckbeta8-1: two alternatively spliced
 RT forms of human beta-chemokine, chemoattractants for neutrophils,
 RT monocytes, and lymphocytes, and potent agonists at CC chemokine
 RT receptor 1."; *Blood* 91:3118-3126(1998).
 CC CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS T CELLS AND MONOCYTES,
 CC BUT NOT NEUTROPHILS, EOSINOPHILS, OR B CELLS. ACTS MAINLY VIA CC
 CC CHEMOKINE RECEPTOR CCR1. ALSO BINDS TO CCR3.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: MOST ABUNDANT IN HEART. SKELETAL MUSCLE AND

Result No.	Query			DB	ID	Description
	Score	Match	Length			
1	264	63.7	92	11	Q9Q2U2	Q9Q2U2 mus musculus
2	260	68.6	81	11	Q9Q2U1	Q9Q2U1 rattus norv
3	260	68.6	92	11	Q912H5	Q912H5 rattus norv
4	158	41.7	91	13	Q8QC57	Q8QC57 gallus gall
5	156	41.2	95	12	Q98158	Q98158 kaposi's sar
6	150	39.6	92	11	Q91265	Q91265 sigmodon hi
7	146.5	38.7	92	11	Q912L0	Q912L0 sigmodon hi
8	143	37.7	92	6	Q8SQ40	Q8SQ40 felis silve
9	142.5	37.6	90	13	Q9PWA6	Q9PWA6 gallus gall
10	142	37.5	89	13	Q918E0	Q918E0 gallus gall
11	141.5	37.3	90	13	Q910C9	Q910C9 gallus gall
12	137.5	36.3	93	6	Q8SQA6	Q8SQA6 bos taurus
13	136.5	36.0	91	11	Q912L1	Q912L1 sigmodon hi
14	133	35.1	93	4	Q96168	Q96168 homo sapien
15	128	33.8	80	4	Q14745	Q14745 homo sapien
16	116.5	30.7	79	4	Q95689	Q95689 homo sapien

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Db      85 KKLHLKLS 92
      1:|||||
      PRELIMINARY; PRT; 81 AA.
RESULT 2
Q90ZU1
AC Q90ZU1; PRELIMINARY; PRT; 81 AA.
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE Macrophage-derived chemokine (Fragment).
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SPRAGUE-DAWLEY; TISSUE=THYMUS;
RA Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
RA Gray P.W.;
RT "Macrophage derived chemokine is localized to thymic medullary
RT epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
RT thymocytes".
RL Blood 0:0-0(1999).
DR EMBL; AF163477; AAD55764.1; -.
DR HSSP; Q98157; ICM9.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
FT NON_TER 1
SQ SEQUENCE 81 AA; 9212 MW; A0A7ED1A0045D80B CRC64;

Query Match
Best Local Similarity 68.6%; Score 260; DB 11; Length 81;
Matches 43; Conservative 17; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADPRVPW 60
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 14 GPGANVEDSICCDYIRHPLPRFVKFYTSKCRKPGVLLTIKRDICADPRMLWV 73
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 61 KMLNKLKS 68
      1:|||||
Db 74 KKLHLKLA 81
      1:|||||

Query Match
Best Local Similarity 68.6%; Score 260; DB 11; Length 81;
Matches 43; Conservative 17; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADPRVPW 60
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 14 GPGANVEDSICCDYIRHPLPRFVKFYTSKCRKPGVLLTIKRDICADPRMLWV 73
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 61 KMLNKLKS 68
      1:|||||
Db 74 KKLHLKLA 81
      1:|||||

RESULT 3
Q91ZH5
ID Q91ZH5; PRELIMINARY; PRT; 92 AA.
AC Q91ZH5;
DT 01-DEC-2001 (TREMBLrel. 19, Created)
DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TREMBLrel. 20, Last annotation update)
DE Macrophage-derived chemokine CCL22.
GN MDC.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LEW;
RA Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
RA Bacon K.B., Feng L.;
RT "Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
RT chemokine results in attenuation of developing crescentic
RT glomerulonephritis".
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF432871; AAL30397.1; -.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
SQ SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;

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Query Match
Best Local Similarity 68.6%; Score 260; DB 11; Length 92;
Matches 43; Conservative 17; Mismatches 8; Indels 0; Gaps 0;

QY 1 GPGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADPRVPW 60
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 25 GPGANVEDSICCDYIRHPLPRFVKFYTSKCRKPGVLLTIKRDICADPRMLWV 84
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 61 KMLNKLKS 68
      1:|||||
Db 85 KKLHLKLA 92
      1:|||||

RESULT 4
Q8QG57
ID Q8QG57; PRELIMINARY; PRT; 91 AA.
AC Q8QG57;
DT 01-JUN-2002 (TREMBLrel. 21, Created)
DT 01-JUN-2002 (TREMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Chemokine ah294.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21655115; PubMed=11797102;
RA Hughes S., Haynes A., O'Regan M., Bumstead N.;
RT "Identification, mapping, and phylogenetic analysis of three novel
RT chicken CC chemokines.".
RL Immunogenetics 53:674-683(2001).
DR EMBL; AY037859; AAK84432.1; -.
SQ SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;

Query Match
Best Local Similarity 41.7%; Score 158; DB 13; Length 91;
Matches 29; Conservative 14; Mismatches 21; Indels 2; Gaps 1;

QY 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRPGVLLTFRDKEICADPRVPW 61
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db 25 PEGA--DTTVCFFNSVRKLPQNHVNDYFTTSKCPQAAVFTTRKGVQCANPDARWVK 82
      |||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
QY 62 MILNKL 67
      1:|||||
Db 83 EYINFL 88
      1:|||||

RESULT 5
Q98158
ID Q98158; PRELIMINARY; PRT; 95 AA.
AC Q98158; O12569;
DT 01-FEB-1997 (TREMBLrel. 02, Created)
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)
DE ORF K6.
OS Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Gammaherpesvirinae; Rhadinovirus.
OX NCBI_TaxID=37296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97094384; PubMed=8939871;
RA Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
RT "Molecular mimicry of human cytokine and cytokine response pathway
RT genes by KSHV.".
RL Science 274:1739-1744(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97121480; PubMed=8962146;
RA Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
RA Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;

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RP SEQUENCE FROM N.A.
RA MDLCLINE=20170941; PubMed=10704244;
RA SLICK C., Schneider K., Staeheli P., Weining K.C.;
RT "Novel chicken CXC and CC chemokines.";
RL Cytokine 12:181-186(2000).
DR EMBL; Y18692; CAB70956.1; -.
DR HSSP; P13236; IHUM.
DR InterPro; IPR001811;. Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
KW Signal.
FT SIGNAL
FT CHAIN
SQ SEQUENCE      89 AA;  9896 MW;  6FA2EA7A4950CA75 CRC64;

Query Match          37.5%; Score 142; DB 13; Length 89;
Best Local Similarity 29.4%; Pred. No. 5.4e-11;
Matches    20; Conservative   23; Mismatches    23; Indels     2; Gaps     1;

Qy      2 PYGANNEDSVCCRDYVRYRPLRVVKVEYFYTSDSCPRPGVVLLTFRDKEICADRPVMK 61
Db      |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
       23 PVGPDV--PTCCITYTHKIPRNLIQRHYSTSCSRPAIFIITKKREVCANFSDPWVQ 80

Qy      62 MILNKLQS 69
Db      |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
       81 RYLQSVKR 88

RESULT ll
Q910C9 PRELIMINARY; PRT; 90 AA.
ID Q910C9 AC Q910C9;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Macrophage inflammatory protein 1-beta.
GN SCYA4.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
NCBI_TaxID=9031;
[1]
SEQUENCE FROM N.A.
Hughes S.M., Bumstead N.;
RT "Mapping of the gene encoding the chicken homologue of the mammalian
RT chemokine SCYA4."
RL Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AJ243034; CAB45103.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE      90 AA;  9987 MW;  50AF9679A267408F CRC64;

Query Match          37.3%; Score 141.5; DB 13; Length 90;
Best Local Similarity 37.9%; Pred. No. 6.4e-11;
Matches    25; Conservative   15; Mismatches    25; Indels     1; Gaps     1;

Qy      2 PYGANNEDSVCCRDYVRYRPLRVVKVEYFYTSDSCPRPGVVLLTFRDKEICADRPVMK 61
Db      |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
       23 PVGSDDPTS-CCTIYSRLPFSEVDVYETNSCPHAGVVFITRKREVCANFENDWVQ 81

Qy      62 MILNKL 67
Db      :||:
       82 DYNKM 87

RESULT 12
Q8SOA6 PRELIMINARY; PRT; 93 AA.
ID Q8SOA6 ID Q8SOA6
AC Q8SOA6;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
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DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DE 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Macrophage inflammatory protein-1 alpha.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RA Werling D.;
RT "Role of chemokines in RSV infection.";
RL Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY077840; AAL78060.1; -.
SQ SEQUENCE 93 AA; 10118 MW; 1266BFBFCE5E8E9 CRC64;

Query Match 36.3%; Score 137.5; DB 6; Length 93;
Best Local Similarity 36.4%; Pred. No. 2.2e-10;
Matches 24; Conservative 16; Mismatches 25; Indels 1; Gaps 1;

Qy 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDCPRGVLLTFDRKEICADPRVPWK 61
Db 25 PFGAD-TPTACCFSVARQLSRKIVADYFETSSQSKPGVIFQTKGRQVCANFTDWVQ 83

Qy 62 MILNKL 67
Db 84 EYITDL 89

RESULT 13
Q91ZL1 PRELIMINARY; PRT; 91 AA.
AC Q91ZL1;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE RANTES chemokine.
OS Sigmmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RA Blanco J.C.; Pletneva L.M.; Prince G.A.;
RT "Sigmmodon hispidus cytokines, chemokines and interferons.";
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF421391; AAL16932.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 91 AA; 10082 MW; D0D6EAEABE4242FF CRC64;

Query Match 36.08%; Score 136.5; DB 11; Length 91;
Best Local Similarity 42.9%; Pred. No. 2.9e-10;
Matches 27; Conservative 12; Mismatches 23; Indels 1; Gaps 1;

Qy 6 NMEDSV-CCRDYVRYRLPLRVVKEYFYTSDCPRGVLLTFDRKEICADPRVPWKIL 64
Db 26 NGSDTIFCCFAYLSAVLPRAHVKEYFYTSSKCSNFVAVFVTRNRQVCANPKKWOEYI 85

Qy 65 NKL 67
Db 86 NYL 88

RESULT 14
Q96I68 PRELIMINARY; PRT; 93 AA.
AC Q96I68;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)

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DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Similar to small inducible cytokine A3 (homologous to mouse
DE Mip-1a).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Tissue-B-CELL;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC007783; AAO77783.1; -.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SQ SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;

Query Match 35.1%; Score 133; DB 4; Length 93;
Best Local Similarity 36.2%; Pred. No. 8.6e-10;
Matches 21; Conservative 13; Mismatches 24; Indels 0; Gaps 0;

Qy 10 SVCCRDYVRYRLPLRVVKEYFYTSDCPRGVLLTFDRKEICADPRVPWKILNKL 67
Db 32 TACCFSTYRQIPQNFADYFETSSQSKPSVIFLTRGRQVCADPSEEWQYVSD 89

RESULT 15
Q14745 PRELIMINARY; PRT; 80 AA.
AC Q14745;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE LD78 alpha beta precursor (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Tissue-BRAIN;
RA Ishizuka K.; Igata-Yi R.; Naruse K.; Nakashima H.; Ohuchi K.;
RA Katsuragi S.; Kin Y.; Ohmoto Y.; Nomiya H.; Iio M.; Miura R.;
RA Miyakawa T.;
RL Submitted (AUG-1995) to the EMBL/GenBank/DBJ databases.
DR EMBL; D63785; BAA09855.1; -.
DR HSPF; P13236; IHUM.
DR InterPro; IPR000827; CC_chemkine_sml.
DR InterPro; IPR001811; Chemokine_IL8.
DR Pfam; PF00048; IL8; 1.
DR SMART; SM00199; SCY; 1.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW Signal.
FT NON_TER 1 1
FT SIGNAL <1 16 POTENTIAL.
FT CHAIN 17 >80 LD78 ALPHA BETA.
FT NON_TER 80 80
FT NON_TER 80 80
SQ SEQUENCE 80 AA; 8857 MW; 8B509EB15648E971 CRC64;

Query Match 33.8%; Score 128; DB 4; Length 80;
Best Local Similarity 38.5%; Pred. No. 3.4e-09;
Matches 20; Conservative 11; Mismatches 21; Indels 0; Gaps 0;

Qy 10 SVCCRDYVRYRLPLRVVKEYFYTSDCPRGVLLTFDRKEICADPRVPWK 61
Db 25 TACCFSTYRQIPQNFADYFETSSQSKPSVIFLTRGRQVCADPSEEWQY 76

Search completed: July 28, 2003, 04:02:52
Job time : 12.7563 secs

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